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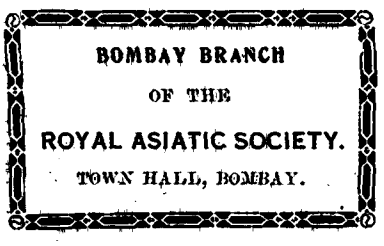

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ENGLISH BOTANY;

OR,

COLOURED FIGURES

OF

BRITISH PLANTS,

WITH THEIR

ESSENTIAL CHARACTERS, SYNONYMS, AND PLACES OF GROWTH.

TO WHICH WILL BE ADDED,

OCCASIONAL REMARKS.

BY

JAMES EDWARD SMITH, M.D. F.R.S.

MEMBER OF THE ACADEMIES OF STOCKHOLM, TURIN, LISBON, UPSAL, LUND, PHILADELPHIA, ETC.

PRESIDENT OF THE LINNEAN SOCIETY.

THE FIGURES BY

JAMES SOWERBY, F.L.S.

———" VIRESQUE ACQUIRIT EUNDO."——— *Virg.*

VOL. V.

LONDON:

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MDCCXCVI.

57281

Goodyera repens.

SATYRIUM repens.

Creeping Satyrion.

GYNANDRIA Diandria.

GEN. CHAR. *Nectary* an inflated roundish bag behind the flower.

SPEC. CHAR. Roots fibrous, creeping. Leaves ovate, radical. Flowers leaning one way.

SYN. Satyrium repens. *Linn. Sp. Pl.* 1339. *Huds. Fl. An.* 387. *With. Bot. Arr.* 982. *Lightf. Fl. Sc.* 520. *f.* 22. bad. *Dicks. Dr. Pl.* 85.

ACCORDING to the custom we have hitherto adopted of beginning each volume with some peculiarly interesting plant, we here exhibit one of the most rare of the favourite Orchis tribe, for which we are obliged to James Brodie, Esq. the gentleman who discovered *Pyrola uniflora* (t. 146.) in Scotland, and communicated it to Mr. James Hoy, as Mr. Hoy himself has informed us since our account of that plant was published. This *Satyrium* grows in Alpine fir forests, not in "pastures and thickets." Our specimens were sent fresh from Scotland by the post, and came in perfectly good order, as plants of this tribe dry so very slowly.

The roots are perennial, truly creeping, not bulbous, very succulent, downy, running among moss, and attaching themselves to decayed fragments and leaves of fir in the manner of fungi. Leaves in tufts at the end of each runner, on broad sheathing footstalks, ovate, succulent, strongly 5- or 7-ribbed, and reticulated with transverse veins, which are often brown, and the leaves are now and then prettily chequered with that colour. Stalks erect, 6 or 8 inches high, round, downy upwards, clothed with a few alternate sheathing bracteæ, and terminated with an erect spike of numerous pale flesh-coloured fragrant flowers, leaning one way, but turning a little spirally round the stalk; each being accompanied by a lanceolate, concave, coloured, downy bractea, longer than the germen, which also is clothed with viscid downiness, as well as the three broader external petals. Haller describes the flower as having only three petals, besides the nectary, which Lightfoot copies, having probably never seen the plant alive, for his plate is excessively faulty. Mr. Sowerby found two internal lanceolate petals (as in the figure) which, like those of *Orchis ustulata*, are very difficult to be detected in a dried specimen, being "glued as it were" to the upper one, which the others are not by any means, though Haller says they are. Perhaps that great naturalist might make slight notes in the field, and confuse himself in copying them afterwards. Lightfoot's account is compiled from Haller's without acknowledgment. His whole book is nearly made up of such plagiarisms, and he is hence often deservedly led astray.

Nardus stricta.

NARDUS stricta.

Mat-grass.

TRIANDRIA Monogynia.

GEN. CHAR. *Cal.* none. *Corolla* of 2 valves.

SPEC. CHAR. Spike slender, erect, the flowers all pointing one way.

SYN. Nardus stricta. *Linn. Sp. Pl.* 77. *Huds. Fl. An.* 22. *With. Bot. Arr.* 54. *Relh. Cant.* 21. *Sibth. Ox.* 33.

Gramen sparteum juncifolium. *Raii Syn.* 393.

THIS grass may be observed on sandy heaths in most parts of England, especially in moist or moorish spots, where it forms thick tufts of rigid rush-like leaves, which remain through winter

——"bleaching in the northern blast."

The roots are perennial, fibrous, strong and downy. Leaves linear, very narrow, acute, striated, rough in the margin, very harsh and rigid, suddenly divaricating from their broad sheathing striated base, which envelops the bottom of the stalk, and is itself enveloped with scales externally, and crowned at the divarication with the usual stipula of grasses. Each stalk supports one leaf, and is erect, striated, rough, of the same texture and harshness as the leaves, and a little longer, bearing a very slender spike of equally slender flowers, alternately placed in two rows, but all pointing one way, though very little divaricated at any time from the stalk, and both before and after flowering clapped close to it. Valves of the calyx unequal in length, purplish and rough in the margin. Filaments a little exceeding the longest valve, tipped with nearly linear antheræ. Germen small. Style solitary, slender, downy.

The Mat-grass flowers in May, June, or later. Of its agricultural uses little can be said, for cattle in general refuse it; and though mats or baskets might be made of it, we are supplied from Spain with better grasses for those purposes, particularly *Stipa tenacissima*.

Silene noctiflora

SILENE noctiflora.

Night-flowering Catchfly.

DECANDRIA Trigynia.

GEN. CHAR. *Cal.* swelling. *Petals 5*, with claws, and with a crown at the mouth. *Caps.* three-celled.

SPEC. CHAR. Calyx with ten angles, and teeth as long as its tube. Stem forked. Petals cloven.

SYN. Silene noctiflora. *Linn. Sp. Pl.* 599. *Huds. Fl. An.* 189. *With. Bot. Arr.* 452. *Relh. Cant. Suppl.* 1. 13. *Sibth. Ox.* 140.

Lychnis noctiflora. *Raii Syn.* 340.

IN sandy fields of the midland and southern counties, not rare in Norfolk and Suffolk, flowering about July.

Root annual, small in proportion to the herb, which often becomes very luxuriant in a manured soil. Stem erect, round, hairy, leafy, repeatedly forked in the upper part. Leaves soft and downy, lanceolate, sessile, the lower ones broadest, and the lowest obovate. Flowers solitary at the divisions of the stem, on hairy viscid stalks, which are short at first, but afterwards lengthened out to about an inch. Calyx white, with green angles and veins, its teeth almost as long as the tubular part. Petals of a cream colour tinged with red, their limb rolled in during the day, but unfolding in the evening, and then the flowers become very sweet-scented, at least while warm weather continues. We believe each flower lasts several days, the petals rolling themselves up every evening till the impregnation is fully accomplished. If so, how is this involution performed? Does the action of light upon the upper surface of each petal stimulate that surface to contract? The phænomena of such flowers as expand or smell only by night, deserve the attention of the physiologist, for they are ruled by very constant laws. We recommend them to the evening meditations of the philosophic recluse, at "that best hour of musing" when the mind turns to Nature and its Author with peculiar complacency.

Lythrum hyssopifolium

LYTHRUM hyssopifolium.

Hyssop-leaved Grass-poly.

DODECANDRIA Monogynia.

GEN. CHAR. *Cal.* with 12 teeth. *Petals* 6, inserted into the calyx. *Capsule* with 2 cells, and many seeds.

SPEC. CHAR. Leaves alternate, linear-lanceolate. Stamina six.

SYN. Lythrum hyssopifolium. *Sibth. Ox.* 149.
L. Hyssopifolia. *Linn. Sp. Pl.* 642. *Huds. Fl. An.* 206. *With. Bot. Arr.* 490. *Relh. Cant.* 183.
Salicaria Hyssopi folio latiore, et angustiore. *Raii Syn.* 367.

ONE of our rarer English plants, for which we are obliged to the Rev. Mr. Abbot of Bedford and the Rev. Mr. Hemsted of Newmarket. It grows in pits and ditches which are partly dried up, or in places where water has stagnated during winter.

The root is annual, tapering, and not much branched. Stems several; the principal erect, often branched; lateral ones spreading and curved upwards; all square, purplish, smooth, clothed with numerous, alternate, smooth, entire, linear-lanceolate leaves, some of which now and then approach to an elliptical figure. Flowers solitary, axillary, sessile, delicate and short-lived, appearing in July, purple, and of a regular figure, as we think all true species of *Lythrum* ought to be, though Linnæus has admitted some with very unequal petals. They have generally 12 teeth to the calyx, alternately erect and spreading, 6 petals, and as many stamina; but some flowers have only 10 teeth, 5 petals and 5 stamina, or (as Linnæus says) exclude a sixth part of the natural number in their fructification. The seeds are exceedingly numerous and minute.

We have ventured, with professor Sibthorp, to make the Linnæan substantive specific name into an adjective, as on former occasions where it could be done.

LICHEN glomuliferus.

Ball-bearing Lichen.

CRYPTOGAMIA Algæ.

GEN. CHAR. Male, scattered warts.
Female, smooth shields or tubercles, in which the seeds are imbedded.

SPEC. CHAR. Foliaceous, creeping, even and glaucous above, bearing dark-green, branched, tufted excrescences. Shields tawny.

SYN. Lichen glomuliferus. *Lightf. Scot.* 853.
L. laciniatus. *Huds. Fl. An.* 544. *With. Bot. Arr. v.* 3. 198.
Lichenoides subglaucum cumatile, foliis tenacibus, eleganter laciniatis. *Dill. Musc.* 197. *t.* 26. *f.* 99.

THIS is by far the largest and broadest *Lichen* known, often measuring two or three feet in diameter, and therefore Scopoli's original name *amplissimus* ought not to have been changed; but Mr. Lightfoot's is so apt, and has been so generally adopted by practical botanists, we retain it in preference to that given by Mr. Hudson, *laciniatus*, which is not expressive nor discriminative at all.

Lichen glomuliferus is found on the trunks of trees in old mountainous woods in England, Scotland, and Wales, very abundantly in Colonel Johnes's woods at Hafod, where ours was gathered. Its fronds spread loosely over the bark, a little imbricated, of a pale glaucous green above when moist, whitish grey when dry, very smooth, scarcely ever rugged; beneath downy, light reddish brown, the margin white. They are elegantly lobed and scalloped, the lobes being all round, and the little sinuses between them often quite circular. The shields are numerous, and by no means very rarely produced, not large, a little elevated, their margin smooth, of the colour and substance of the frond, out of which indeed it is formed by the gradual elevation and increase of the shield from a small immersed point; the disk is concave, of a brownish orange-colour, darker when dry. Besides these shields remarkable tufts or balls, of a dark-green soft branchy substance, with a solid white stem, arise out of the frond. These are more frequent than the shields, found on the same individual plants, and distinguish the species, being supposed to have a share in the fructification. We will not add any new conjectures to those to be found in Withering and Lightfoot, in both which authors this curious plant is well described.

Parmelia herbacea

Pl. 1795 Published by J. Sowerby London

LICHEN læte-virens.

Bright-green Lichen.

CRYPTOGAMIA Algæ.

GEN. CHAR. Male, scattered warts.

Female, smooth shields or tubercles, in which the seeds are imbedded.

SPEC. CHAR. Foliaceous, creeping, obtusely lobed and crenated; bright green above; whitish, downy and without veins beneath. Shields tawny.

SYN. Lichen læte-virens. *Lightf. Scot.* 852. *Dicks. Dr. Pl.* 23.

L. herbaceus. *Huds. Fl. An.* 544. *With. Bot. Arr. v.* 3. 195.

Lichenoides arboreum cinereo virens, tenue et læve ubique, scutellis minoribus. *Raii Syn.* 73.

L. læte virens, scutellis fulvis. *Dill. Musc.* 195. *t.* 25. *f.* 98.

THIS *Lichen* is next akin to that in our last plate, but a perfectly distinct species. We prefer Mr. Lightfoot's name also in this instance, because it has been most generally received, and is expressive of the peculiarly beautiful green which this plant assumes when moistened. Besides, *herbaceus* in botanical language is too generally used to express duration, to be intelligible when applied to colour.

The species before us is found in similar places with the preceding, but more frequently, especially in Derbyshire and Westmoreland. It differs from that in being thinner, less extensive, without the tufted excrescences, and of a very different colour. When dry it becomes brown. The shields are copiously produced, a little elevated, their margin smooth, turned in, their disk deep orange, turning brown in drying.

1053.

Hypericum perforatum.

Jun.ʸ 1.1805. Published as the Act directs by J.ᵗ Sowerby London.

HYPERICUM perforatum.

Perforated St. John's Wort.

POLYADELPHIA Polyandria.

GEN. CHAR. *Cal.* 5-cleft. *Petals* 5. *Filaments* numerous, united at the base into 3 or 5 sets. *Capsule* roundish.

SPEC. CHAR. Styles three. Stem two-edged. Leaves obtuse, sprinkled with pellucid dots. Calyx-leaves lanceolate.

SYN. Hypericum perforatum. *Linn. Sp. Pl.* 1105. *Huds. Fl. An.* 333. *With. Bot. Arr.* 813. *Relh. Cant.* 288. *Sibth. Ox.* 234. *Curt. Lond. fasc.* 1. *t.* 57. *Woodv. Med. Bot.* 29. *t.* 10.
Hypericum. *Raii Syn.* 342.

AN extremely common plant in groves, thickets, and under hedges, flowering about July and August.

Its woody creeping perennial roots make it very difficult to be extirpated. They throw up numerous stems, about two feet high, perfectly erect, leafy, roundish, but marked with two prominent lines running down from the insertion of every pair of leaves, which render the stem two-edged. Leaves opposite, each pair crossing those below them, oblong, somewhat elliptical, bluntish, entire, with one main rib and several straight veins springing from it, paler and somewhat glaucous beneath, sprinkled with numerous green pellucid dots, easily seen when held against the light, and marked besides with a few dark purple opaque dots, especially on the margin. A short simple leafy branch arises from the bosom of each leaf, the upper ones bearing flowers, and forming a forked leafy panicle terminating the stem. The flowers are bright yellow, and not inelegant. Calyx-leaves lanceolate, pointed, entire. Petals entire at one edge, crenate at the other. Antheræ tipped with a dark purple gland. Stigmas whitish in our specimens, though by some writers described as crimson. The edges of the calyx and petals, as well as their external surface, are marked with dark purple spots and lines, containing a red essential oil soluble in spirits, but the aromatic qualities of the herb appear not to be confined to these spots.

1054.

Hypericum dubium.

Jan.ʸ 1.ˢᵗ 1794. Published by Jᵃˢ Sowerby London.

HYPERICUM dubium.

Imperforate St. John's Wort.

POLYADELPHIA Polyandria.

GEN. CHAR. *Cal.* 5-cleft. *Petals* 5. *Filaments* numerous, united at the base into 3 or 5 sets. *Capsule* roundish.

SPEC. CHAR. Styles three. Stem obsoletely four-edged. Leaves obtuse, destitute of pellucid dots. Calyx-leaves elliptical.

SYN. Hypericum dubium. *Leers Fl. Herborn.* 165.

THAT this is a most distinct species of *Hypericum* from the *perforatum* and all others there can be no doubt, though it seems to have escaped the notice of every author except the accurate Leers, not being mentioned even as a variety by any other that we can find. Neither is it, as Leers was induced to suspect, the *H. perfoliatum* of Linnæus. This addition to our catalogue of British natives was discovered in July 1794 by Dr. John Seward of Worcester, growing plentifully about Sapey in that county, and was ascertained by the Rev. Mr. Douglas to be the *H. dubium* of Leers. Dr. Smith has received it from Switzerland, by favour of Mr. Davall, under the same denomination, and found it himself very abundantly last August about Colonel Johnes's delightful and romantic place at Hafod, Cardiganshire, as well as in Mr. Knight's fine woods at Downton Castle near Ludlow, where it is much more common than the *perforatum*. It may perhaps be found in other parts of our island when accurately sought for.

In habit, size, and colour, this plant very nearly agrees with the *perforatum*, but differs essentially from that species in having no pellucid dots apparent on the leaves, and in the calyx-leaves being elliptical and obtuse. The latter indeed, and even the bracteæ, are sprinkled with pellucid dots and lines, and the petals, as well as the edges of the leaves, marked with opaque purple, as in that; but in addition to the above differences, the stem of *H. dubium* is in the upper part almost quadrangular; and it may even be known before it comes out of the ground, by the much more vivid red of the young shoots.

770.

June 1, 1796 Published by P. Curtis, London.

AQUILEGIA vulgaris.

Common Columbine.

POLYANDRIA Pentagynia.

GEN. CHAR. *Cal.* none. *Petals* 5. *Nectaries* 5, horn-shaped, alternate with the petals. *Capsules* 5, distinct.

SPEC. CHAR. Nectaries equal to the petals; their horns incurved. Leaves and stem smooth.

SYN. Aquilegia vulgaris. *Linn. Sp. Pl.* 752. *Huds. Fl. An.* 235. *With. Bot. Arr.* 562. *Relh. Cant.* 207. *Sibth. Ox.* 169.

A. flore simplici. *Raii Syn.* 273.

COLUMBINES in a wild state are found in woods, thickets, and pastures, in several parts of England. They are not rare in Derbyshire and Westmoreland. Mr. Wagstaffe of Norwich sent us a specimen from that neighbourhood, where, especially about the meadows at St. Faith's Newton, the plant grows perfectly wild, flowering in June. From its frequency in gardens, it sometimes occurs (of various forms and colours) about dunghills, but is seldom permanent in such places.

The root is perennial. Stem not very leafy, branched, each branch bearing a solitary drooping flower. Leaves mostly radical, on very long foot-stalks, twice ternate, obtusely lobed, glaucous beneath, smooth; those on the stem nearly sessile, and more simple, the uppermost consisting of 3 entire and acute leaflets. Sometimes the stem bears only such. The stem is purplish and glaucous. Flowers purple, rarely rose-coloured. Germens invested with a plaited lacerated membrane.

In mountainous situations what the plant loses in luxuriance it gains in neatness and elegance of foliage, and then the nectaries are sometimes found rather less curved. Hence Mr. Hudson thought he had discovered *A. alpina* in Westmoreland; but on seeing Dr. Smith's specimens of the true Alpine Columbine from Mount Cenis, he allowed it to be quite distinct from any thing he had observed of British growth. Our Flora therefore can properly boast but one species of this genus.

Jun.e 1796 Published by J.t Sowerby London

CRATÆGUS torminalis.

Wild Service Tree.

ICOSANDRIA Digynia.

GEN. CHAR. *Cal.* in 5 segments. *Petals* 5. *Berry* inferior, with two seeds.

SPEC. CHAR. Leaves somewhat heart-shaped, serrated, seven-lobed; the lower lobes divaricating.

SYN. Cratægus torminalis. *Linn. Sp. Pl.* 681. *Huds. Fl. An.* 214. *With. Bot. Arr.* 511. *Sibth. Ox.* 156. Mespilus Apii folio sylvestris non spinosa, seu Sorbus torminalis. *Raii Syn.* 453.

THIS tree is most frequent in the north-west and midland counties, though also found here and there in Essex, Suffolk, and Norfolk. We received it wild from Mr. Woodward.

It is of considerable size, but of slow growth, and the wood is consequently hard. The bark is smooth and ash-coloured. Young branches green and slightly downy, clothed with alternate handsome smooth leaves, of a firm not succulent substance, always more or less accurately 7-lobed, reticulated with small veins, serrated, deciduous. Flowers numerous, in large terminal cymose panicles, appearing early in May; their flower-stalks and calyx downy; petals cream-coloured; styles 3, 4, or 5, and the seeds in proportion, an instance (among many others) how very ill-founded the orders and genera are of Linnæus's *Icosandria Digynia, Trigynia,* and *Pentagynia,* as Haller and his disciples long ago contended.

The fruit of this tree ripens late in autumn, and forms panicles of brown punctated berries, larger than those of the Hawthorn, which, when the frost has touched them, are of an exceedingly pleasant acid flavour, and are sometimes sold in the London fruit-shops. They are esteemed strengthening to the stomach and bowels. Old Tragus, whose figures and their accompaniments sometimes express the virtues of plants with more truth than decorum, gives a ludicrous exhibition of two little boys under this kind of Service tree, p. 1010, in order to illustrate its (apparently very powerful) effects in expelling worms.

1869.

Sphærocarpus terrestris.

Lith. Hanhart & Ashton after Drawing by Tuckey.

SPILEROCARPUS terrestris.
Reticulated Sphærocarpus.

CRYPTOGAMIA Algæ.

GEN. CHAR. *Cal.* ventricose, undivided. *Seeds* very numerous, collected into a globe.

SPEC. CHAR. . . . . .

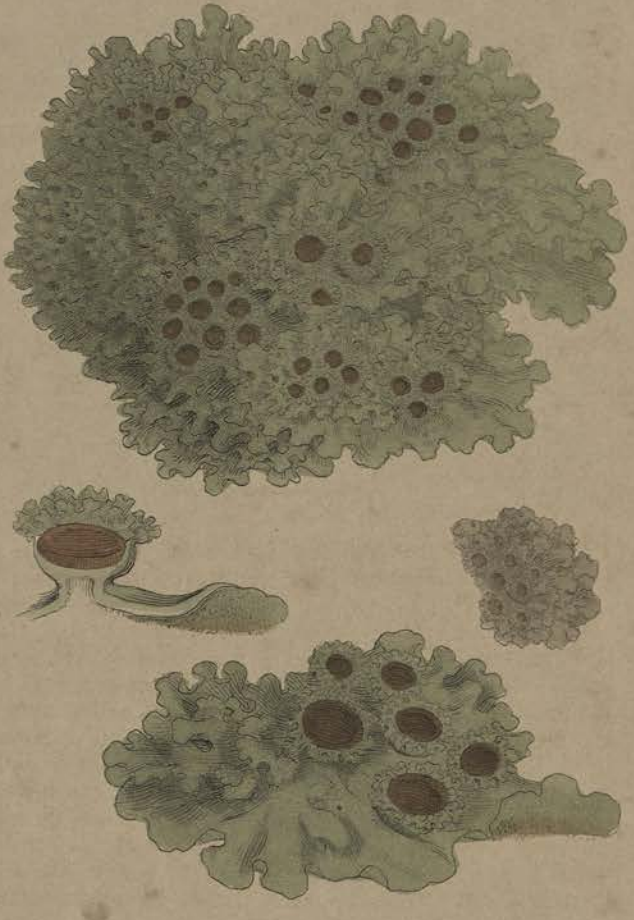
SYN. Sphærocarpus terrestris, minima. *Mich. Gen.* 4. *t.* 3. *Dill. Musc.* 536. *t.* 78. *f.* 17.

Targionia sphærocarpus. *Dicks. Fasc.* 1. 8. *With. Bot. Arr. v.* 3. 157.

OBSERVED by the Rev. Mr. Bryant, Mr. Crowe, and Mr. Woodward, in clover, turnep, and other fields in Norfolk, covering the earth copiously in the moist winter months, particularly on strong land. A certain glaucous hue distinguishes it at first sight to those who have seen it once, though its minuteness and figure may have occasioned its remaining so long undiscovered, from its resemblance to a small *Bryum* without fructification. Even Dillenius never found this plant, but has taken it up on Micheli's authority.

The whole habit is very delicate and membranous, of a pale glaucous green. Fronds in clusters, nearly horizontal, attached to the ground by short radicles, oblong, waved, their disk covered with tufts of the fructification. Calyx of an inverted pear-shape, like a little bottle or vinegar cruet, erect, pellucid, of a finely reticulated structure; its orifice contracted and a little notched. Seeds forming a globe in the bottom of the calyx, clothed with a fine transparent skin, and, as Micheli observes, not intermixed with any fibres.

Mr. Dickson first made this plant known to the English botanist, and reduced it to the genus of *Targionia*. We are very loth to dissent from our great Cryptogamist, but on mature deliberation think it safest to retain Micheli's original genus, the essential character being so very clear, and the habit so totally distinct from the true *Targionia* (see our t. 287), which is of the same natural tribe as *Marchantia*; whereas *Sphærocarpus* is closely allied to *Blasia* in habit, and not far remote in generic character. As to the name, we retain it on the ground of originality, though writers on Fungi have applied it to some genus of their own, and Gmelin in his heedless compilations has called a plant in Monandria *Sphærocarpus*. It is best never to apply any old name (though laid aside) to a new genus; but the sound principles of nomenclature have of late been too much slighted.



Collema Burgessii

LICHEN Burgessii.

Crowned Lichen.

CRYPTOGAMIA Algæ.

GEN. CHAR. Male, scattered warts.
Female, smooth shields or tubercles, in which the seeds are imbedded.

SPEC. CHAR. Leafy, somewhat imbricated, curled. Shields elevated, brown, slightly concave, with a green, leafy, curled and sinuated border.

SYN. Lichen Burgessii. *Linn. Syst. Veg. ed.* 13. 807. *Lightf. Scot.* 827. *t.* 26. *Huds. Fl. An.* 538. *With. Bot. Arr. v.* 3. 189.

HITHERTO this curious *Lichen* has been found only in Dumfriesshire, Scotland, by the Rev. Dr. Burgess; but our specimens were gathered last summer on trunks of trees in the wild and beautiful country about the Devil's bridge, Cardiganshire, and at Hafod in that neighbourhood, by Dr. Smith. It grows, by no means copiously, in patches about as broad as the hand, the fronds being lobed, sinuated, curled and clustered together, so as to elevate one another into a thick cushion-like tuft; their substance is thin and pellucid, of a dull green, smooth above, finely downy beneath, when dry becoming of a purplish brown, and the under side whitish or hoary. The shields arise from the disk of the frond, in tolerable plenty when they are at all to be found, and the frond protruding with them makes them seem pedunculated, though they are really sessile; their disk is slightly concave, smooth, red brown, with a narrow, scarcely perceptible, border of its own substance and colour, and the whole enclosed in a luxuriant curled leafy elevated margin of the colour and texture of the frond.

Mr. Lightfoot describes the shields as, when wet, of the same colour with the leaves; whereas they are of a rather brighter brown in that state than when dry. Indeed his whole description is not made with all that attention which so new and singular an object deserved.

Solidago
Virgaurea.

Pubd. 1st Oct. 1806 by S. Curtis, Scholl Hill, Kensington.

SOLIDAGO Virgaurea.

Common Golden-rod.

SYNGENESIA Polygamia-superflua.

GEN. CHAR. *Receptacle* naked. *Down* simple. *Ligulate florets* about *5*. *Calyx-scales* imbricated, closed.

SPEC. CHAR. Stem slightly zigzag, angular. Flower-clusters panicled, upright, crowded.

SYN. Solidago Virgaurea. *Linn. Sp. Pl.* 1235. *Huds. Fl. An.* 367. *With. Bot. Arr.* 917. *Relh. Cant.* 318. *Sibth. Ox.* 254.
Virga aurea. *Raii Syn.* 176.

IN woods, copses, and among furze upon heathy ground not unfrequent, flowering from July to September.

Root perennial, of long simple fibres. Stem very various in height, from 10 inches to 3 feet, curved below, then erect, leafy, very slightly zigzag, angular and striated, rough, a little downy. Leaves harsh, clothed with short rigid down, paler beneath, on winged footstalks; the radical ones obovate, or at least very broadly lanceolate, serrated, or rather crenate; those on the stem alternate, narrower and more entire. Flowers yellow, in terminal and axillary erect clusters, forming a dense panicle, which varies extremely as to luxuriance and number of flowers. Bracteæ lanceolate, downy. Calyx-scales with a membranous border, downy. Rays of the flower from 5 to 9 or 10. Seed-down rough when magnified. The herb bruised smells like wild carrot. It has been esteemed a vulnerary, and is recommended to be taken internally as well as applied to the wound. As a tonic it may strengthen the general habit of body, and by that means be of use.

Some botanists have suspected our Golden-rod to be different from the *S. Virgaurea* of Linnæus, but on a careful comparison of specimens we find them precisely the same.

299.

Campanula latifolia

CAMPANULA latifolia.

Giant Bell-flower.

PENTANDRIA Monogynia.

GEN. CHAR. *Cor.* bell-shaped, closed at the bottom by valves bearing the stamina. *Stigma* 3-cleft. *Caps.* inferior, opening by lateral pores.

SPEC. CHAR. Leaves ovato-lanceolate. Stem unbranched, round. Flowers solitary, pedunculated. Fruit drooping.

SYN. Campanula latifolia. *Linn. Sp. Pl.* 233. *Huds. Fl. An.* 96. *With. Bot. Arr.* 218. *Relh. Cant. Suppl.* 2. 10. *Lightf. Scot.* 141.

C. maxima foliis latissimis. *Raii Syn.* 276.

IN the north of England, and in Scotland according to Mr. Lightfoot, this species of *Campanula* is not unfrequent, though rare in the southern counties. It grows in shady moist places, about the bases of mountains. Mr. Rose observed it in Forehoe wood near Kimberley, Norfolk. Our wild specimen grew near Dunstable, where it was first remarked and ascertained by our obliging correspondent the Rev. Mr. Abbot, for many botanists overlook this plant for *C. Trachelium.*

Root perennial, very milky as well as the whole herb. Stem 3 or 4 feet high, erect, simple, cylindrical or very slightly angular, leafy. Leaves alternate, nearly sessile, large, roughish, paler beneath, doubly serrated. From the bosoms of the upper ones arise solitary naked flower-stalks, scarcely ever bearing more than one flower; we have not found the pair of "leaf-scales," or rather bracteæ, mentioned in the Bot. Arr. Calyx smooth, serrated. Corolla large and handsome. The antheræ are not large, but afford plenty of pollen, which copiously adheres to the style.

This is sometimes cultivated in gardens. It flowers in August, and is rather ornamental; occasionally varying to white or pale rose-colour.

562.

Acer Pseudo-Platanus.

Pub: 1796 by Sidebotham in Plowright Lynn

ACER Pseudo-Platanus.
Greater Maple, or Sycamore.

POLYGAMIA Monoecia.

GEN. CHAR. Hermaphr. *Cal.* 5-cleft. *Petals* 5, *Stamina* 8. *Pistillum* 1. *Capsules* 2 or 3, single-seeded, terminating in a wing.

Male. *Cal.* 5-cleft. *Pet.* 5. *Stam.* 8.

SPEC. CHAR. Leaves five-lobed, unequally serrated. Flowers in pendent clusters.

SYN. Acer Pseudo-Platanus. *Linn. Sp. Pl.* 1495. *Huds. Fl. An.* 445. *With. Bot. Arr.* 1147. *Relh. Cant.* 380. *Sibth. Ox.* 127.

A. majus. *Raii Syn.* 470.

RAY thinks this tree, so common in hedges, &c. about houses, is not really a native of Britain. We have not observed it in any very wild places. It is said to prefer a maritime situation and exposure, but will grow even in a mountainous one. Being a large, very handsome, quick growing tree, and not injurious to grass, it was much planted about houses formerly, though Evelyn complains that the leaves fall early, putrefy, and "contaminate and mar our walks," so that he would "banish it from all curious gardens and avenues." The wood, as in all trees of rapid growth, is soft, chiefly used for ordinary utensils. Dr. Withering says sugar may be obtained from the sap, which is more remarkably the case with the *Acer saccharinum* of America.

The bark is smooth, ash-coloured. Branches round. Buds opposite, formed of numerous scales. Leaves 5-lobed, the terminal lobe largest, all veined strongly, and unequally serrated. Stipulæ none. Clusters solitary, axillary, long, drooping, branched and many-flowered. Flowers drooping. Petals green, very like the calyx-segments in size, form, and colour. Germen very hairy. Stigma cloven, revolute. Fruit pendent, smooth; seed-wings often 3, not much divaricated. It ripens in August, the flowers appearing in May.

We have great reason to suspect there are two varieties if not distinct species of this tree, in one of which the leaves are glaucous beneath and their serratures very distant; the filaments of this are hairy. Our intelligent friend Andrew Caldwell, Esq. of Dublin, first suggested the idea of this difference, and the Linnæan herbarium confirms his suspicion.

Acer campestre.

ACER campestre.

Common Maple.

POLYGAMIA Monœcia.

GEN. CHAR. Hermaphr. *Cal.* 5-cleft. *Pet.* 5. *Stam.* 8. *Pist.* 1. *Caps.* 2 or 3, single-seeded, terminating in a wing.

Male. *Cal.* 5-cleft. *Pet.* 5. *Stam.* 8.

SPEC. CHAR. Lobes of the leaves obtuse, notched. Flowers in upright clusters.

SYN. Acer campestre. *Linn. Sp. Pl.* 1497. *Huds. Fl. An.* 445. *With. Bot. Arr.* 1148. *Relh. Cant.* 380. *Sibth. Ox.* 127.

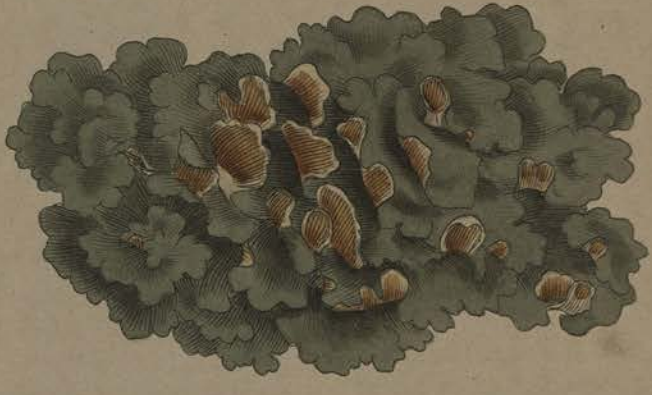
A. minus. *Raii Syn.* 470.

NOT rare in hedges and thickets in the southern counties, though seldom found in the northern ones or in Scotland.

It is a small tree, with spreading divaricated round opposite branches, their bark smooth, though that of the stem is full of corky fissures. Footstalks downy as well as the leaves, which are smaller than in most of our trees, opposite, 5-lobed, each lobe having one or two notches. Stipulæ none. Clusters of flowers appearing in May or June, erect, terminal, branched. Flowers green, much like those of the preceding. Their antheræ (as in that) are hairy between the lobes. Capsules downy, extremely divaricated; wings smooth.

The wood is very useful for turners, being compact, of a fine grain, and often beautifully veined. The antient Romans are said to have set an exhorbitant value upon their tables of maple-wood, according to their size and the beauty of their veins. See Evelyn's *Sylva*.

2217



Nephroma resupinata?

Tab. [illegible] Published [illegible] by Lindsay

LICHEN resupinatus.

Reversed Lichen.

CRYPTOGAMIA Algæ.

GEN. CHAR. Male, scattered warts. Female, smooth shields or tubercles, in which the seeds are imbedded.

SPEC. CHAR. Coriaceous, creeping, lobed, brown. Shields marginal, on the under side of the frond.

SYN. Lichen resupinatus. *Linn. Sp. Pl.* 1615. *Huds. Fl. An.* 545. *Lightf. Scot.* 843. *With. Bot. Arr. v.* 3. 205.

Lichenoides saxatile fuscum, peltis in aversa foliorum superficie locatis. *Raii Syn.* 77.

L. fuscum, peltis posticis ferrugineis. *Dill. Musc.* 206. *t.* 28. *f.* 105.

IN woods, clinging close to the mossy stems and roots of trees, and also on rocks, in the mountainous parts of Great Britain. Dillenius found it growing upon pebbles on the Sussex coast, and Dr. Smith on the rock of Dumbarton Castle, Scotland, in moist and shady parts.

The fronds are scarcely coriaceous, only its affinity with *L. caninus*, &c. justifies its being placed in that section. They are brown, smooth, somewhat imbricated, horizontal, obtusely lobed, their extremities dilated, bearing the shields on their under side completely concealed from view till the plant is dried up by any means, and then those shield-bearing lobes are reflexed. The disk of the shield is roundish, irregular in shape and various in size, concave, tawny or brick-coloured; they become darker in drying, though the colour of the frond is scarcely changed.

Carex ovalis.

Publ.d 1790. Bibl.

CAREX ovalis.

Oval-spiked, or Naked Carex.

MONŒCIA Triandria.

GEN. CHAR. Male, *Catkin* imbricated. *Cal.* of one scale. *Cor.* none. Female, *Catkin* imbricated. *Cal.* of one scale. *Cor.* inflated, permanent. *Seed* triangular, invested with the corolla.

SPEC. CHAR. Spikelets about six, oval, close together, alternate. Scales lanceolate, equal to the capsule.

SYN. Carex ovalis. *Gooden. Tr. of Linn. Soc. v.* 2. 148.
C. leporina. *Huds. Fl. An.* 404. *With. Bot. Arr.* 1029. *Relh. Cant. Suppl.* 1. 15. *Sibth. Ox.* 27.
Gramen cyperoides, spica e pluribus spicis mollibus composita. *Raii Syn.* 422.

GATHERED in Kensington Gardens, flowering in June. It is very common in wet marshy pastures.

Root perennial, creeping? Stem, erect, hollow, about a foot high, with 3 sharp rough angles. Leaves sheathing the lower part of the stem, and rising about equal to it in height, dark green, narrow, roughish on the edges and nerve, but less so than in most other species. General spike terminal, erect, composed of 5 or 6 upright oval spikelets, the largest of which is terminal. Bracteæ solitary, lanceolate, at the base of each spikelet, the lowermost longer than the rest, and ending in a leafy point. In each little spike a few of the lower flowers are male, the rest female. Scales ovato-lanceolate, acute, equal to the corolla. Filaments longer than the scales. Style tumid at the base. Stigmas but two. Permanent corolla slightly notched, convex on one side, margin rough.

We beg leave to correct an inaccuracy in the concluding paragraph of the description of *Carex Pseudo-Cyperus*, *t.* 242. We have expressed ourselves as if Dr. Goodenough had called the corolla a capsule, in opposition to Linnæus; whereas the truth is, Linnæus carelessly uses *nectarium* and *capsula* indifferently for the same part, and our excellent friend, to whose labours in this genus the British botanist is so much indebted, takes the latter term merely as the least exceptionable. The part in question however is totally distinct from the germen and fruit, merely enveloping the seed, and is really a permanent corolla.

307
1256
Carex
vulpina

CAREX vulpina.

Great Carex.

MONŒCIA Triandria.

GEN. CHAR. Male, *Cathin* imbricated. *Cal.* of one scale. *Cor.* none. Female, *Cathin* imbricated. *Cal.* of one scale. *Cor.* inflated, permanent. *Seed* triangular, invested with the corolla.

SPEC. CHAR. Spike thrice compounded, compact, obtuse. Male flowers in each spikelet above the female. Fruit spreading. Angles of the stem very sharp.

SYN. Carex vulpina. *Linn. Sp. Pl.* 1382. *Huds. Fl. An.* 404. *With. Bot. Arr.* 1030. *Relh. Cant.* 350. *Sibth. Ox.* 27. *Gooden. Tr. of Linn. Soc. v.* 2. 161. *Leers Herborn.* 196. *t.* 14. *f.* 5.

Gramen cyperoides palustre majus, spica compacta. *Raii Syn.* 423.

THIS is found, rather less frequently than the last, in marshy places, banks of rivers, &c. and is one of the largest as well as best understood British species. It flowers in the early part of summer, but its brown spikes in a seeding state may be found for some time afterwards.

Root perennial, fibrous, forming thick tufts. Stems many, erect, about 2 feet high, stout, very acutely triangular and rough, so as to cut the fingers of those who handle them incautiously. Leaves sheathing the lower part with their whitish membranous base, long, deep green, very rough on the edges and nerve. General spike of several alternate, rather remote, compound spikelets, with a linear bractea to each. Little spikelets small, their male flowers above the female. Scales of the male flowers ovate, acute, membranous; those of the female somewhat abrupt, with a longish rough point. Base of the style tumid. Stigmas two. Permanent corolla slightly notched. The stem above the lowest spikelet, as Dr. Goodenough observes, suddenly diminishes very much in thickness.

Leers's exquisite figures cannot be too much admired, though perhaps he excels less in some of the *Carices* than in other grasses. We mean only to commend his own original plates. Those of the 2d edition are vile copies, in which all accuracy of character is lost, and even many parts totally omitted by the blundering engraver.

781

Adonis autumnalis.

March 1st 1796 Published by J. Sowerby London

ADONIS autumnalis.

Corn Adonis, or Pheasant's-eye.

POLYANDRIA Polygynia.

GEN. CHAR. *Cal.* 5-leaved. *Petals* 5 or more, without a nectary. *Seeds* naked.

SPEC. CHAR. Petals about eight, obcordate, concave. Fruit ovate.

SYN. Adonis autumnalis. *Linn. Sp. Pl.* 771. *Huds. Fl. An.* 239. *With. Bot. Arr.* 570. *Sibth. Ox.* 171. *Curt. Lond. fasc.* 3. *t.* 37.

Flos Adonis. *Raii Syn.* 251.

FOR a wild specimen of this elegant plant we are obliged to Miss Lysons, who gathered it in Gloucestershire in October last. It grows, though rarely, in corn-fields. Mrs. Plestow, of Watlington, in Norfolk, observed it near Denver sluice in that county.

Root small, annual. Stem much branched, upright, leafy, round, striated. Leaves alternate, thrice compound, the segments linear, alternate, acute. Flowers solitary, terminating the branches, inodorous, of a beautiful polished crimson, each petal marked with deep purple at the base, and the stamina, antheræ and styles being of the same dark colour, give a great brightness to the red part. Calyx pale green, somewhat membranous, soon falling off. Petals about 8, rarely more, often fewer, for Linnæus in a manuscript note in his own *Species Plantarum* confesses he took the character there from a luxuriant flower. This species is however distinct enough from the pale-scarlet *A. æstivalis* of the south of Europe, with which Haller in his description, No. 1158, seems to confound it, as Linnæus formerly did. In that the petals are obovate and narrow, the fruit long and cylindrical; in ours the petals are inversely heart-shaped, concave, the fruit rather ovate, and not half so long. It is certainly an error in Linnæus to call the fruit of *A. æstivalis* ovate, and this subcylindrical. The contrary is rather the case; at least the former is truly cylindrical, and very long and slender compared with ours.

921.

March 1st 1796 Published by J.E. Sowerby London

DENTARIA bulbifera.

Bulbiferous Coral-wort.

TETRADYNAMIA Siliquosa.

GEN. CHAR.* *Pod* bursting elastically, the valves rolling back. *Stigma* notched. *Calyx-leaves* connected longitudinally.

SPEC. CHAR. Lower leaves pinnated; the uppermost simple.

SYN. Dentaria bulbifera. *Linn. Sp. Pl.* 912. *Huds. Fl. An.* 285. *With. Bot. Arr.* 683.

THIS rare plant grows wild in some few parts of England, in shady places, especially at Harefield, in a grove now belonging to William Baynes, Esq. and in some parts of Buckinghamshire not far from thence. Our specimen was obligingly communicated by the Rev. Dr. Goodenough from his garden at Ealing, where the Dentaria is perfectly naturalized, and preserves its original wild appearance.

The root is perennial, creeping horizontally, white, fleshy, and set with alternate tooth-like protuberances, which gave occasion to the generic name. Stem from the terminal bud of the last year, erect, round, simple, 18 to 24 inches high, leafy in the middle and upper part. Leaves alternate; the 2 or 3 lowermost pinnate, of 5 leaflets, some above them of 3, and the upper ones simple, gradually lessening; leaflets all lanceolate, very irregularly and partially serrated, smooth, rather succulent. In the bosom of most of the leaves stands a solitary, oval, scaly, dark purple bud or bulb, which falling off vegetates in the ground, and thus the plant is copiously propagated, like the *Lilium bulbiferum*; consequently its seeds are scarcely ever perfected, as happens to plants that increase much by root. The flowers are in a terminal corymbus, lilac-coloured, large and handsome, appearing early in May. The stigma is roundish, slightly notched.

Cornus Suecica.

CORNUS Suecica.

Dwarf Cornel.

TETRANDRIA Monogynia.

GEN. CHAR. *Cal.* of 4 teeth. *Petals* 4. *Drupa* inferior. *Nut* of 2 cells.

SPEC. CHAR. Herbaceous. Flower between two branches.

SYN. Cornus Suecica. *Linn. Sp. Pl.* 171. *With. Bot. Arr.* 161.
C. herbacea. *Huds. Fl. An.* 71.
Chamæpericlymenum. *Raii Syn.* 261.

MR. WILLIAM TRAVIS of Scarborough gathered the specimen here figured on the side of a valley in that neighbourhood, called the *Hole of Horcum*, where this alpine plant grows abundantly, as well as about the Cheviot hills, Northumberland, and in the Highlands of Scotland, flowering in June and July. It is nearly allied to a favourite American plant, *C. canadensis*, but does not thrive so well in a garden.

Root perennial, creeping, long and slender. Stems perfectly herbaceous, erect, rising to the height of 3 or 4 inches, square, leafy. Leaves opposite, sessile, ovate, entire, strongly ribbed, without stipulæ. Flowers in a little terminal pedunculated umbel, with a large involucrum of 4 ovate unequal white leaves, often bordered with red, and turning green as the fruit ripens. Each flower stands on a short partial stalk, and is in every part, except the stamina, of an exceedingly deep purple, almost black. Stamina and antheræ whitish. The umbel might easily be taken, by a casual observer, for one simple flower with 4 white petals, and we are afraid Ray understood it so, having perhaps not seen it alive. The fruit is round, red, sweetish. On each side the stalk that supports the umbel arises the rudiment of a branch, which overtops the fruit before it arrives at maturity. The presence of these branches distinguishes this species from *Cornus canadensis*.

Eriophorum alpinum.

Published by J. Sowerby, London

ERIOPHORUM alpinum.

Alpine Cotton-grass.

TRIANDRIA Monogynia.

GEN. CHAR. *Glumes* chaffy, imbricated on all sides. *Cor.* none. *Seed* 1, invested with very long hairs.

SPEC. CHAR. Stem naked, angular. Spike solitary, erect, shorter than the hair of the seeds.

SYN. Eriophorum alpinum. *Linn. Sp. Pl.* 77. *Flo. Lapp. ed.* 2. 20. *Trans. of Linn. Soc. v.* 2. 290 & 356. *Fl. Dan. t.* 620. *Dicks. Hort. Sicc. Fasc.* 8. 3. Juncus alpinus bombycinus. *Scheuchz. Prod.* 27. *t.* 8. *f.* 1.

FIRST discovered in Britain by Mr. Brown and Mr. George Don, in a turfy bog 3 miles east of Forfar, in the shire of Angus, Scotland.

We are obliged for wild specimens to Mr. John Mackay of Edinburgh, a most diligent and skilful investigator of the vegetable kingdom, by whose communications we have often been enriched. It grows in alpine situations, flowering about July, and has hitherto been announced as a native of our island, in the 2d volume of the Linnean Society's Transactions only.

Root perennial, creeping horizontally among bog-earth and sand, with many fibrous radicles. Leaves few, linear, rough on the edges, obtuse, sheathing at the base, erect, sometimes 3 or 4 together on a barren branch. Stems several, erect, much taller than the leaves, close together, with 3 and sometimes 4 rough angles, striated, their base enveloped in one or more short sheathing leaves, and a few tubular, membranous, bluntly acuminated scales, seeming like the rudiments of leaves. Spike solitary, terminal, erect, oval, small, of several ovate, yellowish brown, sharply keeled scales, the lowermost tipped with a leafy point. Seed sharply triangular, clothed with long, not very numerous hairs, which originate from its base, and rise much above the top of the style. Their extreme whiteness and their delicate texture give an elegant appearance to the plant, though it boasts none of those gaudy colours requisite to excite the attention of many, who really fancy themselves persons of taste and admirers of Nature, but who are as inadequate judges of their own talents, as of the universal elegance and wisdom of the creation around them.

200.

Convolvulus arvensis.

CONVOLVULUS arvensis.

Small Bind-weed.

PENTANDRIA Monogynia.

GEN. CHAR. *Cor.* bell-shaped, plaited. *Stigmas* 2. *Capsule* with 2 cells, and 2 seeds in each.

SPEC. CHAR. Leaves arrow-shaped, the lobes acute. Flowers generally solitary. Bracteæ minute, remote from the flower.

SYN. Convolvulus arvensis. *Linn. Sp. Pl.* 218. *Huds. Fl. An.* 88. *With. Bot. Arr.* 212. *Relh. Cant.* 86. *Sibth. Ox.* 76. *Curt. Lond. fasc.* 2. *t.* 13.
C. minor vulgaris. *Raii Syn.* 275.

BUT too common for the farmer and gardener in fields and all kinds of cultivated land, especially in a gravelly soil, flowering copiously from May to the end of July.

The root is perennial, running so very deep into the ground, and growing so fast, that it is next to impossible to destroy it. Stems very numerous, long, climbing and twining round every thing in their way, angular, slightly downy, not much branched except at the very bottom, clothed with alternate arrow-shaped leaves on downy footstalks. The leaves are very various in breadth, entire, except one tooth sometimes near the base, and a little downy. Stipulæ none. Flowers from the bosom of each leaf, solitary, on long (generally undivided) angular stalks swelling upwards, with a pair of minute bracteæ about their middle, which are downy, narrow, rather lanceolate than subulate, and sometimes even obovate. Flowers very beautiful, rose-coloured, varying with lighter or deeper shades and lines of crimson, the plaits yellowish. They generally close before rain; in dry warm weather they have a very sweet almond-like smell. Calyx with a membranous edge, the leaves obtuse, lying over each other. Antheræ red or white. Style not very long; stigmas nearly equal to it in length, linear, distant. The seeds happily are rarely perfected.

There is a singular variety mentioned by Ray, with a smaller flower, deeply divided into 5 segments, and of a darker red than the common kind. Dr. Smith has observed this in a hedge out of St Giles's gates, Norwich.

Convolvulus sepium.

April 1790 Published as the Act directs by J. Sowerby, No. 7 Lamb's Conduit Street.

CONVOLVULUS sepium.

Great Bind-weed.

PENTANDRIA Monogynia.

GEN. CHAR. *Cor.* bell-shaped, plaited. *Stigmas* 2. *Capsule* with 2 cells, and 2 seeds in each.

SPEC. CHAR. Leaves arrow-shaped, the posterior lobes lopped. Flower-stalks square, single-flowered. Bracteæ heart-shaped, close to the flower.

SYN. Convolvulus sepium. *Linn. Sp. Pl.* 218. *Huds. Fl. An.* 88. *With. Bot. Arr.* 213. *Relh. Cant.* 87. *Sibth. Ox.* 76. *Curt. Lond. fasc.* 1. *t.* 13. C. major. *Raii Syn.* 275.

THIS, one of the most elegant and graceful of all our wild flowers, is equally common with the preceding species, though its place of growth be different. It inhabits moist hedges, twining about willows and reeds, and decorating them with its very conspicuous flowers throughout July and August.

The roots are long, creeping, and perennial, a little fleshy. Stems very long, twining, somewhat angular, smooth, not much branched. Leaves alternate, on smooth footstalks about half their own length, dependent, smooth, of a swelling arrow-shape, with the angles at the base abruptly cut off. Stipulæ none. Flowers solitary, on axillary, undivided, square, curved stalks, with a pair of heart-shaped, red-bordered bracteæ, close to the flower and enfolding the proper calyx, which is smaller, of 5 lanceolate leaves. Corolla generally white, but sometimes (as Dillenius observes in Ray's Synopsis) of an uniform flesh or rose-colour. Antheræ cream-coloured. Stigmas short and thick. Seeds scarcely ever perfected.

An extract of the herb is said to be a violent purge, like Scammony.

Convolvulus Soldanella.

April 1.1796 Published by J.t Sowerby London

CONVOLVULUS Soldanella.

Sea Bind-weed.

PENTANDRIA Monogynia.

GEN. CHAR. *Cor.* bell-shaped, plaited. *Stigmas* 2. *Capsule* with 2 cells, and 2 seeds in each.

SPEC. CHAR. Leaves kidney-shaped. Flower-stalks single-flowered, with membranous angles.

SYN. Convolvulus Soldanella. *Linn. Sp. Pl.* 226. *Huds. Fl. An.* 89. *With. Bot. Arr.* 214.

C. maritimus, Soldanella dictus. *Raii Syn.* 276.

A NATIVE of our sandy sea shores, as at Yarmouth, Lowestoft, &c. The Rev. Mr. Baker and A. B. Lambert, Esq. sent it from Weymouth. The beautiful flowers may be found in July, not much later; they expand only in fine weather and in the early part of the day.

Root long, creeping, perennial. Stems procumbent, spreading in a circular form, 5 or 6 inches long, but little branched, angular, purplish. Leaves on longish foot-stalks, small, dark green, heart- or kidney-shaped, entire, sometimes a little angular. The whole herb is smooth and succulent. Flowers few and large, axillary, solitary, on long flower-stalks thickened upwards, and with 3 or 4 dilated membranous angles. Bracteæ large, ovate, close to the flower. Calyx-leaves large, ovate. Corolla with five acute angles, rose-coloured, the plaits yellowish. Antheræ yellow. Stigmas small and sharp. Capsule four-lobed.

April 1796 Published by J. Sowerby London.

LOLIUM perenne.

Perennial Darnel, or Rye-grass.

TRIANDRIA Digynia.

GEN. CHAR. *Cal.* of one husk, fixed, many-flowered.

SPEC. CHAR. Flowers beardless. The little spikes compressed, longer than the calyx.

SYN. Lolium perenne. *Linn. Sp. Pl.* 122. *Huds. Fl. An.* 55. *With. Bot. Arr.* 120. *Relh. Cant.* 52. *Sibth. Ox.* 50. *Leers Herb.* 47. *t.* 12. *f.* 1.

Gramen loliaceum angustiore folio et spica. *Raii Syn.* 395.

THIS very common species of grass is well known to the farmer by the name of Rye-grass, Ray-grass, or Crap. Its agricultural merits were first discovered in Norfolk, and from thence the seeds have been distributed throughout the kingdom, those who bought them little suspecting the plant was already a weed in their own fields. Its chief use is for an early crop of hay upon high or sandy lands. It makes a fine turf; but though the roots are perennial, it does not last many years, except (according to Stillingfleet) the soil be very rich.

Root of a few simple fibres. Stems a foot high, round, smooth, rigid, with swelling purplish joints. Leaves dark green; stipulæ short and entire. Spike two-ranked and compressed, the common stalk zigzag. Husks lanceolate and acute. Antheræ cloven at each end, purple. Stigmas sessile, downy above. Germen roundish. Seed linear.

The spike is sometimes branched in an alternate manner, and more frequently very much condensed into a flat oval form. It flowers in June.

April 1.1790 Published by J.t Rowe 164.

CYNOSURUS cristatus.

Crested Dog's-tail Grass.

TRIANDRIA Digynia.

GEN. CHAR. *Cal.* of 2 husks, containing few florets. *Partial Receptacle* unilateral, leafy.

SPEC. CHAR. Bracteæ pinnatifid.

SYN. Cynosurus cristatus. *Linn. Sp. Pl.* 105. *Huds. Fl. An.* 59. *With. Bot. Arr.* 95. *Relh. Cant.* 39. *Sibth. Ox.* 52. *Leers Herb.* 49. *t.* 7. *f.* 4.

Gramen cristatum. *Raii Syn.* 398.

THIS grass is equally common with the preceding, making a principal part of the turf on high gravelly or chalky soils, in parks, lawns and sheep-walks, and affords good nourishment to those animals as well as to deer.

The root is tufted, perennial, with long simple fibres. Stems very erect, from a foot to 18 inches high, rigid, round, smooth, clothed about the lower part with shortish, alternate, palish leaves. Stipulæ short. Spike green, erect, about 2 inches long, composed of numerous spikelets, all leaning one way, on a zigzag stalk. Each spikelet is accompanied by another abortive one, which Linnæus calls the bracteæ, resembling a small double-toothed comb. These remain long upon the stalk, turning of a yellowish colour in decay. Ray mentions a variety with 4 rows of spikelets. This *Cynosurus* flowers in June or July.

April 1st 1790 Published by F. Law 1 Ave Maria Lane

DIANTHUS Armeria.

Deptford Pink.

DECANDRIA Digynia.

GEN. CHAR. *Cal.* cylindrical, of one leaf, with about 4 scales at the base. *Petals 5*, with claws. *Caps.* cylindrical, one-celled.

SPEC. CHAR. Flowers clustered, in bundles. Calyx-scales lanceolate, downy, equal to the tube.

SYN. Dianthus Armeria. *Linn. Sp. Pl.* 586. *Huds. Fl. An.* 183. *With. Bot. Arr.* 440. *Sibth. Ox.* 139. Caryophyllus latifolius barbatus minor annuus, flore minore. *Raii Syn.* 337.

ALTHOUGH less striking at first sight than many of its beautiful family, the Deptford Pink will be found on minute examination to be very delicately pencilled, and to possess a great degree of elegance in its form. It loves a gravelly soil, and grows, as Mr. Woodward informed Dr. Withering, not unfrequently in Norfolk. Mr. Sowerby gathered the present specimen a little beyond the Falstaff Inn on Gad's hill, Kent.

Root annual, tapering and zigzag. Stem round, leafy, erect, subdivided, the branches very straight, downy, terminated by little compound clusters of inodorous flowers, which appear in July, and continue to bloom till very late in autumn. The lower leaves are broad and somewhat spatulate; those at each joint of the stem, and under the flowers, narrow, lanceolate and acute; all opposite, entire, a little downy. Scales of the calyx of the form of the upper leaves, and as long as the tube. Petals a little toothed, narrow, sprinkled with minute red dots, and marked with more or less of a line, forming an eye-like ring in the centre of the flower. Each flower lasts but one day, and there is seldom above one expanded at a time in each cluster. The seeds are black, flat and minute.

1449.

Botrychium Lunaria.

April 1st 1796 Published by J. Sowerby London

OSMUNDA Lunaria.

Moonwort.

CRYPTOGAMIA Filices.

GEN. CHAR. *Capsules* naked, globose, two-valved.

SPEC. CHAR. Stalk on the stem, solitary. Frond pinnate, solitary.

SYN. Osmunda Lunaria. *Linn. Sp. Pl.* 1519. *Huds. Fl. An.* 449. *With. Bot. Arr. vol.* 3. 46. *Relh. Cant.* 386. *Sibth. Ox.* 266.

Lunaria minor. *Raii Syn.* 128.

IN plate 209 of the present publication we exhibited the other only true British species of *Osmunda* (for *O. Spicant.* is a *Blechnum*, and *O. crispa* a *Pteris*), and we then promised to give the fructification in a future plate. All we know of that part is the capsule, consisting of a small globe, separating into two equal hemispheres, without any ring or bandage, and containing innumerable seeds like fine dust.

The Moonwort, so called from an obscure crescent-like shape in its leaves, is by no means a common plant; it grows in both moist and dry pastures, among grass, and arrives at perfection the end of June or early in July. Mrs. Kett of Seething favoured us with this specimen from a meadow near her house.

The root consists of thick fibres, from which arises one simple stem, or (as analogy requires it to be called) a frond, composed of a pinnate notched leaf, and a branching spike of capsules. Every part is smooth, but not polished, of a pale green, the capsules turning to a yellowish brown as they ripen. Sometimes the leaf is bipinnate, but that variety is rare.

554.

Oxycoccos palustris.

VACCINIUM Oxycoccos.

Cranberry.

OCTANDRIA Monogynia.

GEN. CHAR. *Cor.* of 1 petal. *Filaments* arising from the receptacle. *Berry* inferior, with 4 cells and many seeds.

SPEC. CHAR. Leaves evergreen, entire, revolute, ovate, acute. Stems creeping, thread-shaped, smooth.

SYN. Vaccinium Oxycoccos. *Linn. Sp. Pl.* 500. *Huds. Fl. An.* 164. *With. Bot. Arr.* 395. *Relh. Cant.* 154. *Dicks. H. Sicc. fasc.* 5. 11.

Oxycoccus seu Vaccinia palustria. *Raii Syn.* 267.

SENT from near Scarborough by Mr. W. Travis. It grows on turfy bogs, mostly intangled in tufts of *Sphagnum* and other bog mosses, which cover the surface of clear shallow waters, so that those who gather the fruit are obliged to wade up to their middle to get at it. The flowers come out in June, and the berries ripen in August. The roots are perennial.

Stems shrubby, slender, trailing and creeping by means of long fibrous roots. Branches scattered, procumbent, leafy, flowering about the upper part. Leaves alternate, on short foot-stalks, small, evergreen, ovate, entire, revolute in the margin; dark shining green above; glaucous beneath. Flower-stalks about an inch long, red, with a few scattered or opposite bracteæ, and each bearing one drooping red flower of sinuglar elegance. Calyx in 4 obtuse fringed segments. Corolla deeply divided into 4 ovate petals, on which account some have judged this species to form a distinct genus from *Vaccinium*. Stamina flat, downy. Antheræ deeply cloven, discharging the pollen by a hole in each point. Berry pear-shaped or globular, of 4 cells, red when arrived at maturity, and often spotted. Our figure represents it not fully ripe, in order to show the cells.

Cranberries, when prepared with sugar, are grateful to most palates. They are brought to London from the moorland counties, and even imported from Russia. The Swedes have no idea of putting them to any other use than to boil silver plate to its proper whiteness, the sharp acid of the cranberry corroding the external particles of the copper alloy.

Reseda Luteola.

March 1796 Printed and sold by Sowerby

RESEDA Luteola.

Dyer's-weed, or Yellow-weed.

DODECANDRIA Trigynia.

GEN. CHAR. *Cal.* of one leaf, divided. *Petals* jagged. *Caps.* of one cell, open at the top.

SPEC. CHAR. Leaves lanceolate, entire, with one tooth on each side at the base. Calyx in 4 segments.

SYN. Reseda Luteola. *Linn. Sp. Pl.* 643. *Huds. Fl. An.* 207. *With. Bot. Arr.* 492. *Relh. Cant.* 184. *Sibth. Ox.* 150.

Luteola. *Raii Syn.* 366.

FOUND chiefly on waste ground, walls and similar places, plentifully about Norwich, where it is used in the woollen manufactory for dyeing yellow and green. The entire plant when about flowering is employed for that purpose. It is an annual, and flowers about Midsummer.

Root small and taper. Stem 2 or 3 feet high, erect, thick, somewhat angular, branched, leafy. Leaves alternate, lanceolate, obtuse, entire, smooth. Spikes terminating the branches, consisting of numerous pale greenish flowers without much smell. Calyx in 4 segments. Petals 3, the uppermost 3-lobed, its middle lobe cloven; the lateral ones simple or 3-lobed. Nectary on the upper side of the flower, notched, greenish. Stamina numerous, hanging down. Valves of the capsule acute, with 3 yellowish intermediate appendages.

There is a variety mentioned by Ray with curled or undulated leaves. The gaping capsule of this genus is remarkable.

Nov 1 1790 Published by P. Curtis Londen

RESEDA lutea.

Wild Mignonette, or Base Rocket.

DODECANDRIA Trigynia.

GEN. CHAR. *Cal.* of one leaf, divided. *Petals* jagged. *Caps.* of one cell, open at the top.

SPEC. CHAR. All the leaves with three segments; the lowermost pinnate.

SYN. Reseda lutea. *Linn. Sp. Pl.* 645. *Huds. Fl. An.* 207. *With. Bot. Arr.* 493. *Relh. Cant.* 184. *Sibth. Ox.* 151.
R. vulgaris. *Raii Syn.* 366.

THIS species is rather less general than the preceding, being confined to chalk countries, where however it grows very abundantly, and is very ornamental, flowering from June to the end of autumn.

Root annual, strong and woody in substance. Stems several, branching into a thick bushy tuft, round, smooth, leafy. Leaves alternate, in three or more linear undulated pointed segments, paler beneath; the lower ones once or even twice pinnated. Spikes terminating the branches, of numerous sulphur-coloured flowers. Calyx in six segments. Petals six, singularly lobed as expressed in our figure. Nectary green.

The *Reseda crispa gallica* of Boccone and Ray seems to be a very trivial variety, having leaves a little more curled, and, in consequence of a mild climate or season, living through the winter, as happens to other species of this genus.

Geranium
phæum.

GERANIUM phæum.

Dusky Cranesbill.

MONADELPHIA Decandria.

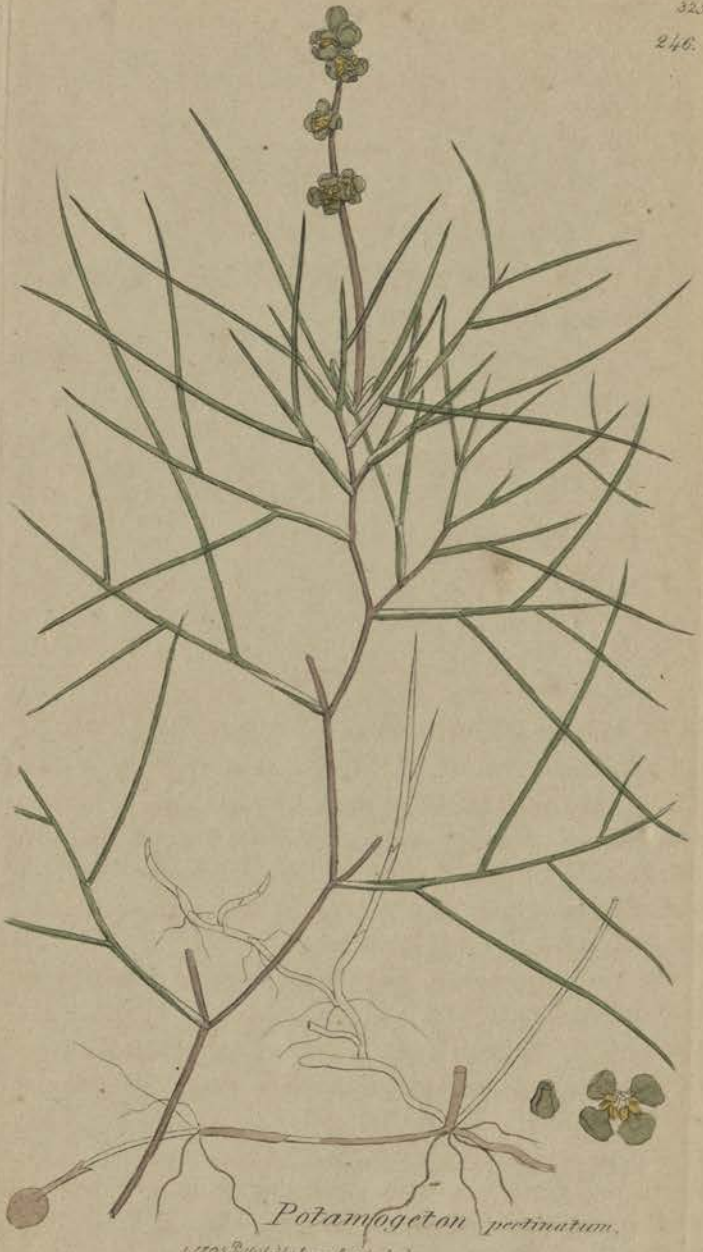
GEN. CHAR. *Style* one. *Cor.* of five petals, regular. *Nectary* five glands at the base of the longer stamina. *Fruit* beaked, separating into five arilli, each tipped with a long simple naked awn.

SPEC. CHAR. Stalks two-flowered, in a leafy panicle. Stem erect. Calyx slightly pointed. Petals waved. Arillus kneeled, hairy below, rugged above.

SYN. Geranium phæum. *Linn. Sp. Pl.* 953. *Huds. Fl. An.* 301. *Relh. Cant. Suppl.* 2. 14.
G. montanum fuscum. *Raii Syn.* 361.

WE received this plant from the Rev. Mr. Abbot of Bedford, who found it at Everholt. Mr. Sims, druggist, of Norwich, showed Dr. Smith specimens gathered in Lancashire, and Mr. Relhan mentions it as a native of Cambridgeshire; but it is perhaps the rarest British *Geranium*. It inhabits dry pastures and thickets, chiefly in mountainous countries, flowering early in summer, and is often cultivated in gardens.

Root perennial, thick and strong. Stem erect, hairy, forked and terminating in a panicle of numerous flowers, on spreading two-flowered stalks, with two pair of small brown chaffy bracteæ at their bifurcation. Calyx-leaves elliptical, tipped with a small point, hairy. Petals dark chocolate-coloured, wavy, with a white claw. Stamina all fertile. Seed-cases strongly keeled, clothed in the lower part with thick upright hairs; at the summit naked, and wrinkled transversely. The leaves are many-lobed and crenate, downy, with prominent interbranching veins; the radical ones on longish foot-stalks, the rest solitarily placed opposite to each flower-stalk, and gradually lessening towards the upper part of the stem. Stipulæ much like the bracteæ, though somewhat larger.



Potamogeton perfoliatum.

1795 Published by James Sowerby

POTAMOGETON pectinatum.

Fennel-leaved Pond-weed.

TETRANDRIA Tetragynia.

GEN. CHAR. *Cal.* none. *Petals* four. *Style* none. *Seeds* four.

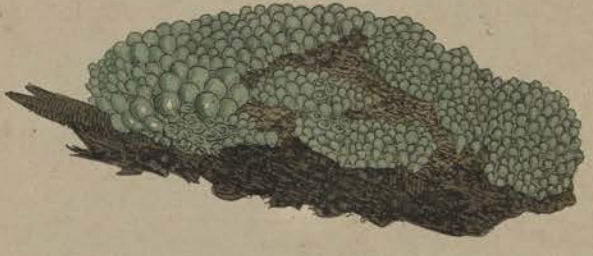
SPEC. CHAR. Leaves bristle-shaped, parallel, thickly set in two ranks.

SYN. Potamogeton pectinatum. *Linn. Sp. Pl.* 183. *Huds. Fl. An.* 76. *With. Bot. Arr.* 175. *Relh. Cant.* 72. *Sibth. Ox.* 66.

P. millefolium, seu foliis gramineis, ramosum. *Raii Syn.* 150.

THE Linnæan Herbarium has no specimen of the *Potamogeton pectinatum;* but from the whole history of this plant in Linnæus and other authors, there can be no doubt of its being what we have here delineated. We are sure this is what Mr. Relhan intended, having received specimens from himself. It occurs not unfrequently in rivers, though, if the stream be rapid, it rarely flowers.

The root is perennial, originating from a tuberous lump, then creeping horizontally, slender, much branched, as is also the stem, which floats under water, extending often two or three feet. The leaves, though extremely narrow and pointed, are flat, and grow alternately, spreading in two directions, on the small branches, having long sheathing bases. The flowers only rise above the water about June or July, in a simple spike, but clustered two or three together irregularly. Petals kidney-shaped, of a dull olive colour. Antheræ yellow, very distinctly two-lobed. Stigmas obtuse, entire.



Botrydium granulosum?

Mayt 1796 Published by J. Sowerby London

TREMELLA granulata.

Granulated Tremella.

CRYPTOGAMIA Algæ.

GEN. CHAR. *Fructification* scarcely perceptible, in a membranous jelly-like substance.

SPEC. CHAR. Green, globular, clustered, membranous, containing a fluid.

SYN. Tremella granulata. *Huds. Fl. An.* 566. *With. Bot. Arr. v.* 3. 225. *Relh. Cant. Suppl.* 1. 26.

T. globosa. *Weis Gotting.* 28.

T. palustris, vesiculis sphæricis fungiformibus. *Dill. Musc.* 55. *t.* 10. *f.* 17.

Ulva granulata. *Linn. Sp. Pl.* 1633. nec *Mant.* 136.

Lichenoides fungiforme, capitulis vel vesiculis sphæricis aqueo humore repletis. *Raii Syn.* 70.

GATHERED very abundantly Sept. 8, 1795, at Camberwell in a pond partly dried up, also on the mud of ditches in that neighbourhood. It consists of innumerable green globules, about the size of mustard seed, sessile at first, but soon elevated on a thick foot-stalk, attached to the mud by fibrous roots, but not connected with each other by any kind of crust or leaf. When walked upon they crackle under the feet like thin ice, and discharge a watery fluid; which also comes out spontaneously, as the plant advances in age, by an orifice at the top, and immediately afterwards the skin collapses, forming a little cup with a hole in the centre. See our magnified representations.

Mr. Relhan justly observes that the *Ulva granulata* of Murray's *Syst. Veg.* taken up from the *Mantissa,* must, from the description, be a different plant from that intended in the *Species Plantarum* and *Flora Suecica,* which last is unquestionably our present *Tremella.*

648.

COTYLEDON Umbilicus.

Common Navel-wort.

DECANDRIA Pentagynia.

GEN. CHAR. *Cal.* five-cleft. *Cor.* of one petal. *Nectary* of five scales at the base of the germen. *Capsules* five.

SPEC. CHAR. Leaves peltate, scolloped. Stem spiked, rarely branched. Flowers pendulous. Bracteæ entire.

SYN. Cotyledon Umbilicus. *Linn. Sp. Pl.* 615. *Huds. Fl. An.* 194. *With. Bot. Arr.* 463. *Sibth. Ox.* 143.
C. vera, radice tuberosa. *Raii Syn.* 271.

FOR this wild specimen, gathered on walls at Peterborough, we are indebted to the Rev. Mr. Hemsted. The plant is most frequent in the west of England and Wales, growing on moist rocks. In Gerarde's time it grew over the door of Poet's Corner, Wesminster Abbey, but was not to be found there when his second edition was published. It flowers in June, and lasts through July.

Root perennial, tuberous. Stem round, very succulent (as are also the leaves), purplish, erect, terminating in a simple or branched spike of numerous, drooping, pale-yellow flowers. Leaves smooth, mostly peltate, on longish foot-stalks, more or less deeply and acutely crenate, those on the stem becoming less peltate and more deeply notched the higher they are situated, and at length changed for small, lanceolate, entire bracteæ. Corolla cylindrical, the margin in five small erect segments. Antheræ on very short filaments, inserted in two rows just within the orifice of the corolla, and not projecting beyond its margin.

Though this be the variety β of Linnæus, yet being by far more common than his α, we think it best to retain it as the true *C. Umbilicus*, as all authors have done. If the α (Mr. Hudson's *lutea*) be really distinct, we shall take some other opportunity of describing it.

Alisma
ranunculoides

ALISMA ranunculoides.

Lesser Water Plantain.

HEXANDRIA Polygynia.

GEN. CHAR. *Cal.* of three leaves. *Petals* three. *Seeds* many.

SPEC. CHAR. Leaves linear-lanceolate. Fruit globose. Seeds acute.

SYN. Alisma ranunculoides. *Linn. Sp. Pl.* 487. *Huds. Fl. An.* 158. *With. Bot. Arr.* 382. *Relh. Cant.* 150. *Sibth. Ox.* 120.

Plantago aquatica minor. *Raii Syn.* 257.

GROWS in swampy turfy places, not very frequently. M. J. Rayer gathered it on Finchley Common, flowering in August.

Root perennial, of many long simple fibres, as in most aquatic plants, from the crown of which arise several upright, narrow-lanceolate, smooth, entire leaves, on long very spongy foot-stalks. Stalk mostly taller than the leaves, upright or decumbent, round, smooth, bearing two or more whorls (often proliferous) of flowers on long flower-stalks, with small membranous bracteæ at their insertion. Calyx-leaves small, roundish, concave, permanent. Petals much larger, of an elegant pale purple, yellow at their base, expanding in the middle of the day, slightly waved. Stamina short. Germens very numerous, collected into a small globe. Seeds with five angles, and an acute point, forming a round bristly head, by which it may always be distinguished from every variety of A. *Plantago*, the seeds of which are very blunt and compressed.

Teesdalia nudicaulis.

IBERIS nudicaulis.

Naked-stalked Candy-tuft.

TETRADYNAMIA Siliculosa.

GEN. CHAR. *Cor.* irregular, the two external petals being the largest. *Pouch* with many seeds, notched.

SPEC. CHAR. Stem herbaceous, naked and simple Leaves sinuated.

SYN. Iberis nudicaulis. *Linn. Sp. Pl.* 907. *Huds. Fl. An.* 285. *With. Bot. Arr.* 682. *Relh. Cant.* 249. *Curt. Lond. fasc.* 6. *t.* 42. *Dicks. Hort. Sicc. fasc.* 1. 10.

Nasturtium petræum. *Raii Syn.* 303.

THERE are but two species of *Iberis* found in Britain, neither of them very common. The *amara* has been already figured in this work, plate 52. That now before us is found on a dry gravelly soil in several places about London, Norwich and Bury. We received it from W. Matthew, Esq. in flower, May 9th, 1793, being quite a spring plant.

Root annual. Herb varying much in size according to the greater or less luxuriance of the soil, and consisting of several leaves of a lyrate form (a few of them generally entire), spreading flat upon the ground. Stalks several, unbranched; the central one always erect and naked, the others spreading or decumbent, often bearing one or two leaves. Flowers white, in a small corymbus, afterwards lengthened out into a spike, on compressed flower-stalks. Calyx of four equal, concave, purplish leaves. Inner or upper petals as long as the calyx; outer ones about twice as long; all entire. Stamina all very nearly equal in length, though the two outer ones, being more spreading, seem the shortest, all of them bearing, on their inner side, near the base, a very singular petal-like appendage, which authors have not much noticed. Pouch curved upwards, concave above, convex below.

328.

452.

Statice reticulata.

June 1, 1797 Published by James Sowerby, London.

STATICE reticulata.

Matted Sea Lavender.

PENTANDRIA Pentagynia.

GEN. CHAR. *Cal.* of one leaf, entire, plaited, filmy. *Petals* five. *Seed* single.

SPEC. CHAR. Stalk panicled, prostrate; its branches zigzag, the barren ones bent back. Leaves wedge-shaped, a little pointed.

SYN. Statice reticulata. *Linn. Sp. Pl.* 394. *Huds. Fl. An.* 133. *With. Bot. Arr.* 327.

THIS species of *Statice* is hardly to be found in any other part of Great Britain than on the coast of Norfolk, where it covers many acres of muddy salt marshes with its blue flowers in July and August, especially about Wells, Cley and Holkham. Our specimen was gathered below Wisbeach, by the Rev. Mr. Hemsted.

Root strong, woody and perennial, bearing thick tufts of small, narrow, obovate, or wedge-shaped, leaves, slightly pointed, and entire. Stalks prostrate, destitute of leaves, very much branched, the branches zigzag, matted and entangled with each other, with an ovate, sharp, membranous bractea at each divarication. The bark in our specimens is a little crisped and tuberculated, which we do not observe in the Linnæan ones. Many of the branches are barren, and those often reflexed, but not always. Flowers few together in simple terminal spikes, erect, each enveloped in three or four larger sheathing bracteæ. The ribs of the calyx, and the petals, are of a bright purplish blue, which turns white in drying.

There cannot be said to be a good figure of this plant extant. Plukenet's *t.* 42. *f.* 4. is most like *S. echioides*, and Boccone's *Sic. t.* 44. is too imperfect to be of any service.

1761.

Dyphyscium foliosum.

BUXBAUMIA foliosa.

Leafy Buxbaumia.

CRYPTOGAMIA Musci.

GEN. CHAR. *Capsule* oblique, membranous on one side, gibbous on the other, with a lid. *Veil* deciduous.

SPEC. CHAR. Stem none. Capsule nearly sessile, surrounded with leaves.

SYN. Buxbaumia foliosa. *Linn. Fil. Meth. Musc.* 33. *t.* 1. *f.* 4. *With. Bot. Arr. v.* 3. 77. *Dicks. H. Sicc. fasc.* 2. 20.

Phascum montanum. *Huds. Fl. An.* 466.

P. maximum. *Lightf. Scot.* 693.

Sphagnum acaulon maximum, foliis in centro ciliaribus. *Dill. Musc.* 253. *t.* 32. *f.* 13.

OUR specimens of this rare moss were gathered by T. F. Forster, jun. Esq. in September 1794, on the rocks near Hamsil forge (commonly called Harrison's rocks), and on Eridge rocks, Sussex, near Tunbridge-Wells.

It grows in little patches on the upright stone, but each plant is separate from the rest, consisting of several erect leaves, the inner ones long-pointed, embracing a solitary nearly sessile capsule, which is oblique, the top pointing upwards; its orifice is ciliated with several white permanent teeth. Lid conical, with a little constriction in the middle. The veil we have not seen. The obliquity of the capsule forms its most obvious generic character.

1802.

Phascum
rectum.

PHASCUM curvicollum.

Crooked Phascum.

CRYPTOGAMIA Musci.

GEN. CHAR. *Capsule* with a lid, the mouth ciliated. *Veil* minute, deciduous.

SPEC. CHAR. Stem none. Capsules on curved stalks. Leaves ovato-lanceolate, acuminated, spreading.

SYN. Phascum curvicollum. *Dicks. Crypt. fasc.* 2. 1. *With. Bot. Arr. v.* 3. 73. *Relh. Cant. fasc.* 3. 8.

GATHERED by the Rev. Mr. Hemsted on a dry bank near Newmarket; Mr. Dickson found it on barren grassy spots near Croydon. It ripens its fruit in April or May, and may probably be not uncommon, though so minute as to be rarely perceived.

Each plant is simple, with a fibrous root, a few lanceolate, entire, pointed, pellucid, spreading leaves, which vary in breadth, and from the centre of which arises a short, reddish, curved and recurved stalk, bearing a roundish capsule of the same colour. The lid ascends obliquely. The veil is more considerable and permanent than the generic character seems to require, nor can we discover any satisfactory reason why this plant should not be esteemed a *Bryum*, though for the present we leave it where the most accurate judges have placed it, at least till some more solid generic characters of mosses can be discovered.

Viburnum Lantana.

VIBURNUM Lantana.

Mealy Guelder-rose, or Way-faring Tree.

PENTANDRIA Trigynia.

GEN. CHAR. *Cal.* superior, of five leaves. *Cor.* in five segments. *Berry* with one seed.

SPEC. CHAR. Leaves heart-shaped, serrated, veiny, downy beneath.

SYN. Viburnum Lantana. *Linn. Sp. Pl.* 384. *Huds. Fl. An.* 129. *With. Bot. Arr.* 318. *Relh. Cant.* 126. *Sibth. Ox.* 104.

Viburnum. *Raii Syn.* 460.

RAY mentions this shrub as growing in a clay soil. We have observed it most plentifully, and apparently in its true wild situation, in chalky places, as about Henley, Oxfordshire; not but that it occurs also here and there in the woods and hedges of most parts of England, flowering in May.

It is a thickly-branched shrub or small tree, growing to a larger size in the north of England (as Ray also remarks) than in the south; its twigs round, pliant, and mealy, with the same kind of tufted stellated pubescence as is found on the flower-stalks, backs, and even upper sides of the leaves. The leaves are opposite, as in the whole genus, somewhat elliptical, heart-shaped at the base, obtuse, serrated, strongly veined, without stipulæ. Flowers in large terminal cymes, white, with yellowish antheræ. Stigmas sessile, very short and thick. Berries compressed. When young (as in our figure) they are red on the outermost side, yellow on the other; but when quite ripe they turn black. They have a little mealy astringent pulp. Seed large, flat and furrowed.

This is supposed to be the *Viburnum* of Virgil; but the poet says nothing by which it can be ascertained, mentioning it only in his 1st eclogue, ver. 26.

The leaves turn dark red in autumn.

Viburnum Opulus.

VIBURNUM Opulus.

Common Guelder-rose, or Water Elder.

PENTANDRIA Trigynia.

GEN. CHAR. *Cal.* superior, of five leaves. *Cor.* in five segments. *Berry* with one seed.

SPEC. CHAR. Leaves lobed; their foot-stalks set with glands.

SYN. Viburnum Opulus. *Linn. Sp. Pl.* 384. *Huds. Fl. An.* 130. *With. Bot. Arr.* 318. *Relh. Cant.* 127. *Sibth. Ox.* 104.

Opulus. *Raii Syn.* 460.

THIS shrub is common in woods and hedges in watery places, flowering early in June; the bright-red berries ripen about September, and towards the middle of October the leaves assume a beautiful pink-colour, affording another instance, in addition to that of the Cornel (see tab. 249), of a genus, mostly American, the leaves of which turn red in autumn. In gardens the Guelder-rose, bearing round bunches of abortive flowers only, is very common, elegantly grouping with the Lilac and Laburnum in the early part of summer.

It is a small bushy tree, smooth in all its parts. Leaves with three great, unequally serrated, lobes; their foot-stalks bearing several cup-like glands towards the top, and a pair or two of erect linear appendages, scarcely to be called stipulæ, near the base. Cymes of many white flowers; the perfect ones small, resembling elder; abortive ones in the margin, each consisting merely of a large irregular flat petal, without organs of fructification. Stigmas nearly sessile, close together. Berries drooping, very succulent. Seed flat, heart-shaped.

1220.

Euphorbia platyphylla.

Pubd. 1798 by Curtis & Sharpe, Gracechurch Street.

EUPHORBIA stricta.

Upright warty Spurge.

DODECANDRIA Trigynia.

GEN. CHAR. *Cor.* of 3 or 4 petals, standing on the calyx. *Cal.* of one leaf, inflated. *Caps.* 3-lobed.

SPEC. CHAR. Umbel of 4 or 5 rays, 3-cleft and cloven. Partial involucra nearly ovate. Leaves lanceolate, serrated, entire at the base, smooth. Fruit warty, without hairs.

SYN. Euphorbia stricta. *Linn. Syst. Nat. ed.* 10. 1049.
E. verrucosa. *Huds. Fl. An.* 209. *With. Bot. Arr.* 497. *Relh. Cant.* 186.
Tithymalus verrucosus. *Raii Syn.* 312.

FOUND by the Rev. Mr. Relhan on the north side of Eversden wood, Cambridgeshire, from whom we received fresh wild specimens Aug. 10, 1795. This very rare plant has been hitherto misunderstood. The true *E. verrucosa* of Linnæus is a perfectly distinct species, found in the south of Europe, with very hairy involucra and capsules. His *stricta*, though so well described in the 10th edition of *Syst. Nat.* was afterwards omitted by Linnæus, and confounded (as his herbarium shows) with *verrucosa*. The specimen there preserved, being from the Levant, is more luxuriant than ours, so that the second divisions of the umbel are mostly three together. The synonyms of the *verrucosa* are in all authors so excessively confused, that we can answer for none but the above. Ray seems (which is seldom the case with him) to have begun the confusion, by taking this English plant for the *Tithymalus verrucosus* of John Bauhin, a species with a creeping root.

Ours appears to be annual, having a very small fibrous root. Whole herb destitute of hairiness. Stem simple, erect, round, purplish. Leaves lanceolate, varying in breadth, entire, and somewhat contracted, towards the base, serrated above. General involucra ovate; partial heart-shaped; all serrated. Petals round, entire, yellow. Germen clothed with tubercles, which as the fruit ripens become prominent prickles. Styles permanent, cloven, united half their length into one.

Vicia sativa.

VICIA sativa.

Common Vetch.

DIADELPHIA Decandria.

GEN. CHAR. *Stigma* transversely bearded on the lower side.

SPEC. CHAR. Pods sessile, nearly upright, generally in pairs. Lower leaves blunt. Stipulæ marked with a discoloured depression on the under side.

SYN. Vicia sativa. *Linn. Sp. Pl.* 1037. *Huds. Fl. An.* 318. *With. Bot. Arr.* 776. *Relh. Cant.* 274. *Sibth. Ox.* 224.

Vicia. *Raii Syn.* 320.

THIS is a wild specimen of the common *Vicia sativa*, so called because it is cultivated as an early fodder for cattle in various parts of Europe, and the seeds are the food of pigeons. It varies much in size, and in the form as well as breadth of the leaves, which are sometimes inversely heart-shaped, sometimes (at least the upper ones) of an elliptic-lanceolate form. It is easily known by the depressed mark on the stipulæ, which looks as if made with a hot iron, and varies in colour from black to brown, and even yellow. The root is annual. Stems weak, procumbent if the tendrils meet with nothing to cling to for support, angular and furrowed, as are also the common foot-stalks of the leaves. Flowers in shades of elegant purple. The pods are more generally horizontal than erect.

Mr. Hudson's variety β of his *V. lathyroides* is generally agreed to be a variety of the *sativa*. Its pods are erect, black, cylindrical—the flowers deep red. We have received it from Weymouth by favour of Sir Thomas Cullum. The α of *V. lathyroides* Huds. seems to be the more common variety of *sativa* mentioned in Withering; but their synonyms are not very easily to be ascertained.

July 1st 1790 Published by J. Sowerby London

DACTYLIS glomerata.

Rough Cock's-foot Grass.

TRIANDRIA Digynia.

GEN. CHAR. *Cal.* of 2 valves, compressed; one valve larger, and carinated.

SPEC. CHAR. Panicle crowded, leaning one way.

SYN. Dactylis glomerata. *Linn. Sp. Pl.* 105. *Huds. Fl. An.* 43. *With. Bot. Arr.* 94. *Relh. Cant.* 39. *Sibth. Ox.* 43.

Gramen asperum. *Raii Syn.* 400.

ONE of the most common of all grasses, in pastures, hedges, thickets, &c. remarkable for thriving under the shade and drippings of trees, and thence sometimes (as Dr. Withering mentions) called Orchard Grass. It is a harsh coarse grass, not eaten by cows (according to the experiments of Linnæus), nor much preferred by other domestic animals.

Root strong and perennial. Leaves dark green, carinated, harsh and rough. Stipula bifid, or torn. Stems two feet high, rough, leafy, terminating in a sort of pyramidal branched panicle, consisting of several thick tufts of flowers all leaning one way, by which it may be readily distinguished. The lower branches of the panicle are much divaricated, and sometimes compound. Antheræ reddish, hanging out of the flower on long filaments. Each calyx contains three, four, or more florets, with both petals pointed, and one shortly awned. It flowers from June to August.

1494.

Chara vulgaris.

CHARA vulgaris.

Common Chara.

MONANDRIA Monogynia.

GEN. CHAR. *Cal.* none. *Cor.* none. *Anthera* sessile. *Style* none. *Berry* with many seeds.

SPEC. CHAR. Stem and leaves rough, striated, without prickles. Leaves and leaflets tapering, channelled above, not jointed.

SYN. Chara vulgaris. *Linn. Sp. Pl.* 1624. *Huds. Fl. An.* 397. *With. Bot. Arr.* 1015. *Relh. Cant.* 345. *Sibth. Ox.* 1. *Gærtn. Sem. v.* 2. *t.* 84.
C. vulgaris fœtida. *Raii Syn.* 132.

COMMON in muddy stagnant ditches, flowering in July.

The root is presumed to be annual. The herb floats under water, and is harsh to the touch, fœtid; very brittle and gritty when dry. Stems branched, striated, rough, but destitute of prickles. Leaves six or eight in a whorl, as long as the joints of the stem, and of the same texture, awl-shaped, narrow, pointed, channelled above; the lower ones simple; the others bearing on their upper sides rows of erect leaflets, four in a cluster, among which the flowers are placed, and these leaflets are by Linnæus and Jussieu described as the calyx. The analogy of *Hippuris*, to which (as Dr. Stokes and the most intelligent systematic writers have observed) this genus is nearly allied, makes us conceive the flower to be really a naked one. The anthera is solitary, sitting at the base of the germen (or sometimes unaccompanied by any germen), red or yellowish, in decay cracking into several angular portions. Germen ovate, yellow or whitish, spirally striated, and crowned with five little leaves. Fruit with a hard shell. Seeds imbedded in a reddish pulp.

It will easily be perceived how naturally this genus comes into *Monandria Monogynia* next to *Hippuris*. As it flowers under water, no wonder if the nature of its anthera and pollen be obscure; but we cannot with Gærtner (see his preface, p. 33.) doubt the part we have described to be the anthera.

It is the opinion of our ingenious friend Mr. Correa, that the impregnation may be performed within the stem by a clandestine communication between the anthera and germen, and also that the five leaves which crown the germen are not (as has been supposed) the stigma, but the tips of a five-leaved calyx closely enfolding that part in a spiral manner. This merits a further inquiry.

Pyrus aucuparia.

Aug.st 1. 1796 Published according to the Act by Lee & Kearsley Lombard.

SORBUS aucuparia.

Mountain Ash, or Quicken Tree,

ICOSANDRIA Trigynia.

GEN. CHAR. *Cal.* in 5 segments. *Petals* 5. *Berry* inferior, with 3 seeds.

SPEC. CHAR. Leaves pinnated, smooth on both sides.

SYN. Sorbus aucuparia. *Linn. Sp. Pl.* 683. *Huds. Fl. An.* 215. *With. Bot. Arr.* 513. *Relh. Cant.* 190.

S. sylvestris, foliis domesticæ similis. *Raii Syn.* 452.

THIS elegant tree grows very abundantly in mountainous (not alpine) woods, especially in the northern counties, and is now indeed pretty generally dispersed through the kingdom, having been so very frequently planted about houses for ornament. The flowers appear in May, and the berries ripen in September.

It is of slow growth; the wood tough and close-grained, not very hard; bark smooth, greyish. Leaves winged; their leaflets serrated, entire at the base, smooth above, and nearly so beneath, except a few fine scattered hairs, and their under side is also glaucous. The flowers are white, in large terminal corymbi. Petals very concave. Germen hairy; styles 3, sometimes 4, the seeds answering to them in number. Berries bright red, very juicy, acid astringent and bitter, scarcely eatable when raw, though a not unpleasant jelly is prepared from them in the Highlands with sugar.

Artemisia
campestris.

ARTEMISIA campestris.

Field Southernwood.

SYNGENESIA Polygamia-superflua.

GEN. CHAR. *Receptacle* slightly downy. *Seed-down* none. *Cal.* imbricated, the scales roundish and closed. *Flowers* of the radius without a corolla.

SPEC. CHAR. Leaves in many linear segments. Stems procumbent before flowering, wand-like.

SYN. Artemisia campestris. *Linn. Sp. Pl.* 1185. *Huds. Fl. An.* 357. *With. Bot. Arr.* 889.

Abrotanum campestre. *Raii Syn.* 190.

THE field southernwood has hitherto been found in no part of England but about Thetford, where it was discovered in Ray's time, and still grows by the side of the great road about a mile from that town in the way to Norwich, and also on Icklingham heath, eight miles from Bury, from whence the wild specimen here delineated was sent by Sir Thomas Cullum, Bart.

The whole herb is without smell, and flowers in August.

Root perennial, producing the first year a number of long-stalked pinnated and deeply divided leaves, spreading flat on the ground in the form of a star; from the centre of which the stem comes out the summer following, prostrate at first, but rising when the flowers appear, branched, and clothed with alternate, more sessile, and less compound leaves, the uppermost being perfectly simple. The segments of all the leaves are linear, more or less clothed with close-pressed silky hairs beneath. Branches forming long simple racemes of small drooping flowers on slender foot-stalks, each accompanied by a small simple leaf. The receptacle, as Linnæus observes, in this and some other species, is naked, and not downy.

490.

Asparagus officinalis.

Pubd. 2 Jan. 1790 by Curtis & Co. Fenchurch Street London.

ASPARAGUS officinalis.

Common Asparagus.

HEXANDRIA Monogynia.

GEN. CHAR. *Cor.* in 6 segments, erect, inferior. *Berry* of 3 cells, with 2 seeds in each.

SPEC. CHAR. Stem herbaceous, generally erect, round. Leaves bristle-shaped, flexible. Spines none. Stipulæ solitary.

SYN. Asparagus officinalis. *Linn. Sp. Pl.* 448. *Huds. Fl. An.* 145. *With. Bot. Arr.* 352.
Asparagus. *Raii Syn.* 267.

FEW persons would suppose the diminutive herb before us to be the origin of our luxuriant garden Asparagus, commonly called Sparrow-grass, and very vulgarly *Grass*. It grows wild in maritime places in the south of England, abundantly on the pebbly beach opposite the ferry going from Weymouth to Portland Island, from whence we received it by favour of A. B. Lambert, Esq. flowering in August.

Root perennial, creeping, with very long thick simple fibres, as in most of this natural order. Stem erect, occasionally procumbent, round, simple, and bearing alternate scales (or stipulæ) without leaves below, in the upper part branching in a panicled alternate manner. Leaves in tufts, very narrow and bristly, but flexible, not rigid or spinous. Stipulæ solitary, membranous, triangular, acute, the upper ones ovate and jagged. We have never (as Dr. Stokes also remarks) found the inner stipulæ mentioned by Linnæus. Flowers from the axillæ of the branches, on capillary simple stalks, drooping. Not finding their inner segments reflexed, as the generic character of Linnæus requires, we have altered that character. The flowers appear hermaphrodite, though in some the stamina, in others the pistillum, are occasionally abortive. Style deeply 3-cleft. Berry red, sometimes in a poor soil perfecting but one seed in each cell.

Briza media.

BRIZA media.

Common Quaking-Grass, or Cow-Quakes.

TRIANDRIA Digynia.

GEN. CHAR. *Cal.* of 2 valves, with many flowers; the little spike two-ranked, its valves heart-shaped, obtuse, the innermost smaller.

SPEC. CHAR. Little spikes ovate. Calyx shorter than the florets, which are about seven in number.

SYN. Briza media. *Linn. Sp. Pl.* 103. *Huds. Fl. An.* 38. *With. Bot. Arr.* 92. *Relh. Cant.* 38. *Sibth. Ox.* 43. *Mart. Fl. Rust. t.* 39. *Dicks. H. Sicc. fasc.* 5. 2.
Gramen tremulum. *Raii Syn.* 412.

VERY common in pastures, where, as Professor Martyn observes, it is made into hay with other grasses, but never cultivated alone for any particular purpose. The roots are perennial, and the flowers appear in May.

Root fibrous. Straw upright, from 6 to 18 inches, most commonly about a foot, in height, round, very smooth, with one or two joints near the bottom. Leaves mostly at the root, with one from each joint of the stem as usual in grasses, the sheaths of which last are very long, the stipules very short, blunt, and entire. Branches of the panicle purplish, spreading, the lowermost in pairs, the others alternate, all so extremely slender, and more or less zigzag, that the spikes, which hang drooping from their extremities, tremble at the least breath of air or other cause of agitation; from which circumstance, as well as their elegant form and shining brown colour, they excite the admiration of the most incurious. The calyx is generally of a darker colour than the floral valves, but like them in shape; the florets are about 7, in two ranks, so that the spike is much compressed, and of a broad ovate figure.

Parmelia perlata?

Pub.d 1.st Feb. 1803 by Baldwin & Cradock Paternoster Row London

LICHEN perlatus.

Pearly Lichen.

CRYPTOGAMIA Algæ.

GEN. CHAR. Male, scattered warts.

Female, smooth shields or tubercles, in which the seeds are imbedded.

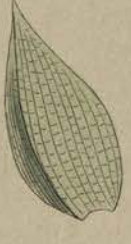
SPEC. CHAR. Leafy, creeping, lobed; grey and smooth above; black and hairy below; bordered with powdery tubercles. Shields on short foot-stalks, olive-coloured, concave, with a crenate powdery inflexed margin.

SYN. Lichen perlatus, *Linn. Syst. Nat. ed.* 12. *v.* 2. 712. *Huds. Fl. An.* 543. *With. Bot. Arr. v.* 3. 205. *Relh. Cant.* 434. *Sibth. Ox.* 330. *Smith's Tour, v.* 1. 225. 260.

Lichenoides glaucum perlatum, subtus nigrum et cirrosum. *Dill. Musc.* 147. *t.* 20. *f.* 39.

FOUND on the trunks of trees, old park pales, &c. very frequently, but it is one of the most rare of all Lichens in fructification. Our specimen in that state was gathered in Cardiganshire last summer, and is the only British one we ever saw.

The fronds spread into patches about as broad as the hand, not very firmly attached in any part, and the margin is quite loose and generally erect. Their upper surface is of a greyish white, greenish when very much moistened, smooth, though a little pitted; sometimes indeed it becomes sprinkled with mealy cracks and tubercles intermixed with short black hairs. The under side is very black, partly smooth and shining, partly clothed with short black rigid branched or forked hairs, which sometimes project beyond the margin like a fringe; at other times the margin is smooth, and chesnut-coloured, beneath. The more elevated parts of the frond, especially in the centre of each patch, are bordered with roundish grey mealy tubercles, compared by Dillenius to pearls, by which this species is essentially distinguished from *L. saxatilis*, *glaucus*, and some others near it. Shields a little elevated, cup-shaped, concave; their disk of a greenish olive when wet, browner when dry; their margin inflexed, grey, powdery, crenate and lobed. Dillenius errs in describing the hairs of the under surface as not branched.



Funaria hygrometrica.

Smith & Elder, 65 Cornhill & 15 Waterloo Place, London.

BRYUM hygrometricum.

Yellow twisting Bryum.

CRYPTOGAMIA Musci.

GEN. CHAR. *Caps.* with a lid. *Veil* smooth. *Flower-stalk* from a terminal tubercle.

SPEC. CHAR. Stem none. Capsule drooping, pear-shaped. Veil oblique, angular, with a slender beak. Leaves ovate, collected together at their points.

SYN. Bryum hygrometricum. *Huds. Fl. An.* 488.

Mnium hygrometricum. *Linn. Sp. Pl.* 1575. *With. Bot. Arr. v.* 3. 86. *Relh. Cant.* 399.

Funaria hygrometrica. *Sibth. Ox.* 288.

Bryum aureum, capitulis reflexis piriformibus, calyptra quadrangulari, foliis in bulbi formam congestis. *Raii Syn.* 101.

B. bulbiforme aureum, calyptra quadrangulari, capsulis piriformibus nutantibus. *Dill. Musc.* 407. *t.* 52. *f.* 75.

EXTREMELY common on moist garden walks and neglected flower-pots, waste ground, heaths, &c. producing its capsules in the spring and early part of summer abundantly.

Roots long, simple, downy. Stem none, or very short, bearing a few broad, ovate, entire, acute, pellucid leaves, so curved in and collected together by their points as to form a little ball, or bulb as it were, according to Dillenius's definition. Stalk long, simple, upright, yellow, then purple, its summit incurved and bearing a pear-shaped obliquely pendent capsule, which is green when unripe, with a yellowish blunt lid, and enfolded in a long, slender, sharp-pointed veil with several angles (not always exactly four), the lower part of which becoming stretched by the swelling capsule, the point is bent to one side, and soon afterwards the veil falls to the ground. The capsule turns yellow in ripening; brown and rugose in decay, discharging great plenty of an impalpable pale-brown powder, which is the seed.

Linnæus in his *Flora Suecica* rightly asserts, that if the lower half of the stalk be moistened, the capsule turns one way, and if the upper half (not as erroneously translated in the *Bot. Arr.* the *head*, or capsule) receives the moisture, it turns in a contrary direction.

Crocus sativus.

Sept.r 1796 Pubd. by R. Pulteney & Dryd.r Harrison London.

CROCUS autumnalis.

Saffron, or Autumnal Crocus.

TRIANDRIA Monogynia.

GEN. CHAR. *Cor.* in 6 divisions, regular. *Stigmas* convoluted.

SPEC. CHAR. Sheath of one leaf, radical. Tube of the corolla very long. Stigma in three deep linear divisions hanging out of the flower.

SYN. Crocus sativus *α*. *Linn. Sp. Pl.* 50. *Huds. Fl. An.* 13. *With. Bot. Arr.* 37. *Relh. Cant.* 15. *Woodv. Med. Bot. t.* 176.
C. officinalis. *Mart. Fl. Rust. t.* 58.
Crocus. *Raii Syn.* 374. *Ger. em.* 151.

SAFFRON has very little right, as Professor Martyn observes, to a place in the British Flora, having been introduced from the south of Europe for culture as a medicinal plant. We should scarcely indeed have followed the example of our predecessors in retaining it, were it not for the authority of the Rev. Mr. Wood, who found it about Halifax, and of Mr. Whately, who observed it near Derby, according to Dr. Withering. Our specimen came from Saffron Walden, the only place in which this article of the materia medica is now produced for sale in England. See a full account of it in the Flora Rustica and Medical Botany.

Root a depressed bulb. Leaves all radical, invested with membranous sheaths, from which they emerge but little before the flowers fade; they are linear, dark green above, with a white longitudinal furrow; pale beneath, with a very prominent but flattened mid rib; their margins slightly revolute. Flowers sessile at the root, though with so long a cylindrical tube as to seem pedunculated; the limb in 6 elliptical, concave, rich-purple, regular segments. Stamina shorter than the corolla, erect. Style about equal to the corolla, but hanging out on one side between 2 of its segments, being deeply cloven into three deep-orange linear stigmas (which are the Saffron itself), their edges rolled in, their summits notched.—It flowers in August or September. A kind of tap-root frequently grows from the bulb, which is considered by the cultivators as a disease.

CROCUS vernus.

Spring Crocus.

TRIANDRIA Monogynia.

GEN. CHAR. *Cor.* in 6 divisions, regular. *Stigmas* convoluted.

SPEC. CHAR. Sheath of one leaf, radical. Tube of the corolla very long. Stigma in three short wedge-shaped lobes, enclosed within the flower.

SYN. Crocus vernus. *Mart. Fl. Rust. t.* 59.

C. sativus β. *Linn. Sp. Pl.* 50. *Huds. Fl. An.* 13. *With. Bot. Arr.* 38.

C. vernalis cæruleus. *Deering Nottingh.* 60.

THIS wild specimen of the Spring, or Garden, Crocus was gathered by Mrs. Sherbrooke of Arnold near Nottingham, March 15th last, in the same meadows where Dr. Deering observed it 60 or 70 years ago, and which are still rendered quite purple by these flowers every spring; so that this species at least appears to have a better right to be reckoned an English plant than many others universally acknowledged, as the Rev. Mr. Wood, F.L.S. to whom we are indebted for the communication, remarks. Professor Martyn mentions having seen it at Battersea, near the mill, in considerable quantity, above 40 years ago.

It differs from the Saffron Crocus in having broader leaves, with flatter or less revolute edges; yet that difference is not so constant as the great one of the stigmas, which in the plant before us are comparatively very little divided, the segments wedge-shaped, much and unequally notched, erect (not hanging out of the flower), of a paler colour, and quite destitute of the smell and cordial qualities of Saffron.—Their times of flowering are also widely different, this being one of the earliest spring plants, as every body knows by the numerous purple, yellow, and white varieties growing in every garden; the other is quite an autumnal flower, and these differences are permanent under every mode of culture hitherto tried.

Collema nigrescens

LICHEN nigrescens,

Blackish, or Bat's-wing Lichen.

CRYPTOGAMIA Algæ.

GEN. CHAR. Male, scattered warts.

Female, smooth shields or tubercles, in which the seeds are imbedded.

SPEC. CHAR. Leafy, gelatinous, membranous, rugged and blistered, of a dark dull green, the lobes rounded. Shields clustered, reddish brown.

SYN. Lichen nigrescens. *Huds. Fl. An.* 537. *With. Bot. Arr. v.* 3. 198. *Relh. Cant.* 430. *Sibth. Ox.* 328. *Dicks. H. Sicc. fasc.* 11. 22.

L. vespertilio. *Lightf. Fl Sc.* 840.

Lichenoides saxatile membranaceum gelatinosum tenue nigrescens. *Raii Syn.* 72.

L. gelatinosum membranaceum, tenue, nigricans. *Dill. Musc.* 138. *t.* 19. *f.* 20.

NOT unfrequent on the trunks of trees in damp woods, or on moist rocks, &c. It grows in patches lying close to the bark, especially the outermost lobes of the frond, which are rounded and entire, appearing very much wrinkled from numerous oblong parallel pustule-like elevations in the substance of the frond, each of which is hollowed out on the under side. The whole plant is smooth, membranous, tender and gelatinous, of a dull deep green when wet, blackish when dry, and not unaptly compared by Dillenius to a bat's wing. Clusters of little granules arise about the centre of the plant, and sometimes all over it, which are probably *gemmæ*, analogous to the bulbs of *Dentaria bulbifera*, *Lilium bulbiferum*, &c.; and this appears to be the most common mode of propagation in this Lichen as well as some others. The shields are rarely found. When present, they are clustered about the middle of the plant, small, of a reddish brown, each elevated on a little protrusion of the frond, and with a slight entire green margin originating from it. When old they become convex.

Epilobium palustre.

EPILOBIUM palustre.

Narrow-leaved Marsh Willow-herb.

OCTANDRIA Monogynia.

GEN. CHAR. *Cal.* in 4 segments. *Petals* 4. *Capsule* oblong. *Seeds* feathered.

SPEC. CHAR. Leaves opposite, lanceolate, nearly entire. Petals notched at the end. Stem erect.

SYN. Epilobium palustre. *Linn. Sp. Pl.* 495. *Huds. Fl. An.* 163. *With. Bot. Arr.* 391. *Relh. Cant.* 154. *Sibth. Ox.* 123. *Dicks. H. Sicc. fasc.* 2. 15. Lysimachia siliquosa glabra minor angustifolia. *Raii Syn.* 311.

IN marshy moorish land not unfrequent, though easily overlooked from its resemblance to *E. tetragonum*, from which, however, it sufficiently differs in having a round stem, narrow and almost entire leaves, as well as in being generally smaller. It flowers in July, and is one of the least attractive of the whole genus.

Root perennial, fibrous. Stem about a foot high, erect, round, leafy, slightly downy, as are also the young leaves, flower-stalks, germen and calyx. Leaves opposite, nearly sessile, linear-lanceolate, obtuse, entire or very obsoletely toothed. Flowers erect, small, of a pale purple, the petals so notched as to be often inversely heart-shaped. Seeds very numerous, crowned with a tuft of long slender hair. The upper leaves, from whose bosoms the flowers spring, are alternate. Sometimes the whole herb is smooth, or scarcely downy, except the very young shoots and germens.

Œanthe
pimpinelloides.

OENANTHE pimpinelloides.

Parsley Water-dropwort.

PENTANDRIA Digynia.

GEN. CHAR. *Florets* irregular: those of the disk sessile and barren. *Fruit* crowned with the calyx.

SPEC. CHAR. Leaflets of the radical leaves wedge-shaped, cloven; those on the stem entire, linear, very long. General involucrum of several linear leaves.

SYN. Oenanthe pimpinelloides. *Linn. Sp. Pl.* 366. *Huds. Fl. An.* 121. *With. Bot. Arr.* 297.

O. Staphylini folio aliquatenus accedens. *Raii Syn.* 210.

WE have received this from the Rev. Mr. Hemsted, and from the Rev. Mr. Hugh Davies. The latter gathered it in salt marshes near Aber, North Wales.

Root perennial, consisting of several slender fusiform fleshy tubercles, intermixed with fibres. Stem erect, or ascending, with so many angles as to be almost cylindrical, striated, smooth, leafy, not much branched. Radical leaves bipinnate; the leaflets either elliptical and entire, or wedge-shaped, and more or less cloven: Stem-leaves pinnate, scarcely bipinnate; leaflets long, linear and acute. Umbels terminal. Involucra of several linear leaves, the partial ones most numerous. Calyx of 5 unequal, sharp, spreading, considerable leaves. Petals unequal, with a point so inflexed as to render them inversely heart-shaped, as in many of this tribe, sometimes reddish on the back. The flowers appear in July, and perfect but few seeds.

This species is not esteemed poisonous, but the whole genus is certainly to be suspected, on account of the very dangerous *Oenanthe crocata*.

Oenanthe
peucedanifolia

OENANTHE peucedanifolia.

Sulphur-wort Water-dropwort.

PENTANDRIA Digynia.

GEN. CHAR. *Florets* irregular: those of the disk sessile and barren. *Fruit* crowned with the calyx.

SPEC. CHAR. Leaflets all linear. General involucrum none. Knobs of the root sessile, elliptical.

SYN. Oenanthe peucedanifolia. *Pollich Plant. Palat. vol.* 1. 289. *t.* 3. *Sibth. Ox.* 98.

SENT by W. Mathew, Esq. from near Bury, and by the Rev. Mr. Abbot from the neighbourhood of Bedford. Professor Sibthorp also found it in several places about Oxford, as mentioned in his Flora. No other British author has noticed this species, probably having confounded it with *O. pimpinelloides*, which is rather a maritime plant, while *peucedanifolia* grows in fresh inland waters.

The root of this consists of thick oval or elliptical knobs, which taste something like parsnep, but are probably dangerous food. Stem thicker than in the preceding, as well as taller and more erect. Radical leaves bipinnate; stem-leaves scarcely more than pinnate; leaflets all linear and acute, by which it is at once distinguished from the preceding, as well as by the want of a general involucrum, of which there are scarcely ever any signs. The rays of the general umbel are also fewer and much thicker than in *O. pimpinelloides*, and the calyx is more erect. The flowers appear in June, and are often reddish, the marginal ones frequently female only, being impregnated by those of the centre.

1094.

HIERACIUM sabaudum.

Shrubby Hawkweed.

SYNGENESIA Polygamia-æqualis.

GEN. CHAR. *Recept.* naked. *Cal.* imbricated, ovate. *Seed-down* simple, sessile.

SPEC. CHAR. Stem erect, many-flowered. Leaves ovato-lanceolate, dentated, hairy beneath, half-embracing the stem; the lower ones elliptic-lanceolate.

SYN. Hieracium sabaudum. *Linn. Sp. Pl.* 1131. *Huds. Fl. An.* 345. *With. Bot. Arr.* 849. *Relh. Cant.* 298. *Sibth. Ox.* 241.

H. fruticosum latifolium hirsutum. *Raii Syn.* 167.

FREQUENT in coppices and groves, especially on a gravelly soil, flowering from July to September.

The root is perennial. Stem erect, 2 or 3 feet high, round, strong and woody, hairy in the lower part more especially, leafy, panicled more or less at the top. Leaves alternate, broad, acute, very distinctly dentated (of which kind of margin they afford a good example); dark-green and almost smooth above; paler, somewhat glaucous, and very hairy beneath: the lower ones are of a lanceolate-elliptical form, and elongated at their base; the greater part of those on the stem ovato-lanceolate, half-embracing the stem; the upper ones gradually smaller, and the floral ones entire. Flower-stalks erect, downy, forming a thin corymbus, which is liable to many different appearances, either from the injuries of animals, or different degrees of luxuriance. Flowers erect, open in the forenoon only. Calyx downy and hairy. Antheræ greenish. Stigma set with blackish hairs. Receptacle cellular, often a little hairy. Herb milky. In shady damp places the whole plant is sometimes smooth, but always rigid and firm in texture.

Oct.1 1796 Published by P. Stewart, London

PYRUS domestica.
Service Tree.

ICOSANDRIA Pentagynia.

GEN. CHAR. *Cal.* 5-cleft. *Petals* 5. *Apple* inferior, with 5 cells and several seeds.

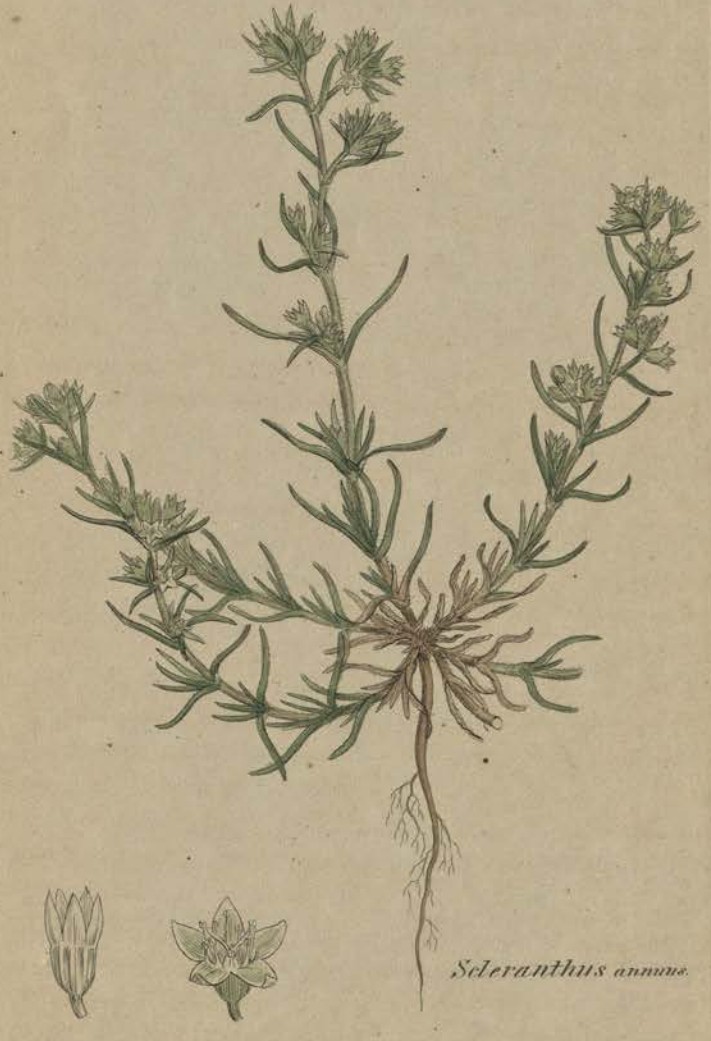
SPEC. CHAR. Leaves pinnate: leaflets equal, downy beneath, serrated towards the point. Flowers in panicles.

SYN. Sorbus domestica. *Linn. Sp. Pl.* 684. *Huds. Fl. An.* 215. *With. Bot. Arr.* 514. *Crantz. Stirp. fasc.* 2. 48. *tab.* 2. *f.* 3.
Sorbus. *Raii Syn.* 452.

WE have been favoured by Lord Viscount Valentia with fresh wild specimens of this rare British plant, gathered from a solitary tree in the middle of Wire forest, near Bewdley, Worcestershire, the same probably that was observed by Mr. Pitts in Ray's time. It is said to grow also in the mountainous parts of Cornwall and Staffordshire, and may now and then be met with in old gardens, having been formerly cultivated for the sake of its fruit, which is like, but inferior to, a Medlar. It flowers in May.

The tree is of a middle size, not unlike the Mountain Ash, of very slow growth, not flowering till it arrives at a great age, and the wood is very hard. Leaves alternate, composed of about 7 or 9 pair of opposite, sessile, ovate or oblong leaflets, with an odd terminal one of the same size; all entire at the base, serrated from about half way to the end, smooth above, downy beneath, but that downiness goes off towards autumn. Flowers in panicles, cream-coloured. Calyx very woolly. Petals concave, with hairy claws. Stamina numerous. Styles always 5, with oblique concave stigmas. Fruit pear-shaped, reddish and spotted, extremely austere, and not eatable till it is quite mellowed by frost or time, when it becomes brown and very soft. Cells 5, with one seed in each.

Every botanical principle whatever obliges us to remove this tree from the genus of Sorbus, as Crantz also observes, who would have been more regarded in many cases than he is, if he had written with more temper. From an accurate examination of the half-ripe fruit, we have found it a genuine pyrus, having indeed only one seed in each bivalve capsule of the apple, but that is not peculiar to this species. The pinnated leaves are (as to *habit*) a much more important objection,



Scleranthus annuus.

Pubd. 1 Sept. 1796 by J. Sowerby, Mineral Repository, London.

SCLERANTHUS annuus.

Annual Knawel.

DECANDRIA Digynia.

GEN. CHAR. *Cal.* of one leaf. *Cor.* none. *Seeds* two, enclosed in the calyx.

SPEC. CHAR. Calyx of the ripe fruit with sharp spreading teeth. Stems spreading.

SYN. Scleranthus annuus. *Linn. Sp. Pl.* 580. *Huds. Fl. An.* 178. *With. Bot. Arr.* 436. *Relh. Cant.* 165. *Sibth. Ox.* 138.
Knawel. *Raii Syn.* 159.

NOTHING can be more common on a sandy soil than *Scleranthus annuus*, especially in fallow fields. It is an annual, flowering about the middle of summer, and sowing its seeds very abundantly in autumn, which produce a crop of young plants that generally survive the winter, or, if destroyed, are replaced by another crop arising from those seeds that happen not to vegetate till spring.

Root annual, long, not much branched. Stems very numerous, spreading in all directions, the outermost decumbent at the base only, not prostrate their whole length, all round, a little downy, much branched, leafy, pale, sometimes reddish. Leaves opposite, united at their base by a dilated, membranous and downy margin, linear, somewhat keeled, acute, smooth, of a grassy green, not glaucous nor silvery. Flowers of the same colour, sessile, in terminal leafy clusters. Calyx with 10 ribs, and cloven half way down into 5 sharp spreading teeth, a little membranous at their edges. Stamina shorter than the calyx, sometimes 10, but generally from 5 to 8, of which several are short and imperfect. Germen superior, ovate. Styles spreading. Stigmas downy. Seed enclosed in the permanent hardened calyx, often solitary (as several writers remark); but we have found two, or at least the unripened rudiments of two.

Scleranthus perennis.

Oct. 1. 1798. Published by J. Sowerby, London.

SCLERANTHUS perennis.

Perennial Knawel.

DECANDRIA Digynia.

GEN. CHAR. *Cal.* of one leaf. *Cor.* none. *Seeds* two, enclosed in the calyx.

SPEC. CHAR. Calyx of the ripe fruit with obtuse incurved teeth. Stems prostrate.

SYN. Scleranthus perennis. *Linn. Sp. Pl.* 580. *Huds. Fl. An.* 178. *With. Bot. Arr.* 437.
Knawel incanum flore majore, perenne. *Raii Syn.* 160. *t.* 5. *f.* 1.

THIS is much more rare than the preceding, having hitherto been observed only in Norfolk and Suffolk, always on the driest barren sandy heaths. We received it from the neighbourhood of Bury, by favour of W. Mathew, Esq. flowering in November, for it is later in that respect than authors mention.

The root is said to be perennial, but that we have not been able to verify. Stems perfectly prostrate and close pressed to the ground, downy in the upper part, often purplish, much branched, especially towards their extremities. Leaves glaucous, "covered with shining pellucid tubercles," according to Mr. Mathew's remark, and sometimes downy. Segments of the calyx with a more membranous border than in *S. annuus*, their points much more obtuse and curved inward. The earlier flowers in the end of summer are of a very silvery appearance, and attract the eye at a distance. Filaments not all perfect. Calyx in the flowering state cloven rather more than half way down, but not so when the germen swells, externally pubescent. When growing old the whole plant becomes of a reddish brown. Dillenius's figure in Ray's Synopsis is too large and upright, and shows nothing that could serve to discriminate so difficult a plant.

Placodium plumbeum?

LICHEN plumbeus.

Lead-coloured spongy Lichen.

CRYPTOGAMIA Algæ.

GEN. CHAR. Male, scattered warts.
Female, smooth shields or tubercles, in which the seeds are imbedded.

SPEC. CHAR. Imbricated. Segments lobed, obtuse, greyish; clothed underneath with very thick, blueish, spongy down. Shields small, flat, rusty-coloured; their margins entire.

SYN. Lichen plumbeus. *Lightf. Scot.* 826. *t.* 26. *f.* 2. *With. Bot. Arr. v.* 3. 187.
L. cærulescens. *Huds. Fl. An.* 531. *Dicks. H. Sicc. fasc.* 10. 24.
Lichenoides tenue et molle, Agarici facie. *Dill. Musc.* 179. *t.* 24. *f.* 73.

BROUGHT from Cardiganshire last summer by Dr. Smith. It grows on trunks of trees, in the mountainous counties of Great Britain, not unfrequently.

The fronds are remarkably thick and cork-like, elevated from the bark on which they grow by a dense spongy coat of blue or lead-coloured down, that is often prominent and visible beyond the margin of the leaf, which seems to be forced up by it. The whole plant has very much the texture of *Boletus versicolor*, as Dillenius well observed; though, not having seen it recent, his description and figure are far from excellent. Mr. Lightfoot's are much better. The upper surface is smooth, but not shining, often longitudinally wrinkled. The shields are very numerous, scattered over the disk of the frond, and often clustered and confluent, of a small size, flat, reddish-brown or rusty-coloured, with an entire margin nearly of the same colour. Specimens which bear no shields are frequently nearly covered with grey granulations or warts, which have been presumed to be the male flowers, and are what Hedwig takes for such. We are inclined to suspect them to be rather analogous to *gemmæ*, or the bulbs of *Lilium bulbiferum*, *Dentaria bulbifera*, &c. and that (as in those) the plant which bears them has a less tendency to bear flowers or seeds; though these warts do also occur on the shield-bearing fronds. We have never, however, traced them to young plants.

170.

Dicranum
scoparium

BRYUM scoparium.

Broom Bryum.

CRYPTOGAMIA Musci.

GEN. CHAR. *Caps.* with a lid. *Veil* smooth. *Flower-stalk* from a terminal tubercle.

SPEC. CHAR. Capsules a little curved, with an awl-shaped lid. Leaves curved to one side. Stem reclining.

SYN. Bryum scoparium. *Linn. Sp. Pl.* 1582. *Huds. Fl. An.* 483. *With. Bot. Arr. v.* 3. 106. *Relh. Cant.* 403. *Curt. Lond. fasc.* 1. *t.* 69.

B. erectis capitulis angustifolium, caule reclinato. *Raii Syn.* 95.

B. reclinatum, foliis falcatis, scoparum effigie. *Dill. Musc.* 357. *t.* 46. *f.* 16.

Dicranum scoparium. *Sibth. Ox.* 281.

A COMMON moss on heaths, dry pasture ground, and the trunks of trees, growing in large patches, easily discernible by their silky glossiness, and which make an elegant kind of artificial turf for clothing the mould of garden pots, when kept in the house.

The stems are perennial, long, standing close together, but a little curved or reclining; clothed with brown silky down, and with numerous, thick-set, narrow, finely tapering, entire leaves, curved towards one side, especially about the summit. The stalks appear in the early part of summer, arising from the scaly termination of each stem, and are long, erect, of a reddish shining yellow, and twisted. They are mostly solitary, and we have reason to suspect the kind with clustered stalks, see *Dill. fig.* D, is a distinct species. The capsules are nearly cylindrical, a little curved. Lid long and taper. Veil of the same figure, straw-coloured. Male flowers few, terminating some of the stems, and surrounded with leaves spreading in the form of a star.

778.

ANEMONE nemorosa.

Wood Anemone.

POLYANDRIA Polygynia.

GEN. CHAR. *Cal.* none. *Petals* six or nine. *Seeds* many.

SPEC. CHAR. Seeds pointed, without tails. Leaflets lobed. Stem single-flowered.

SYN. Anemone nemorosa. *Linn. Sp. Pl.* 762. *Huds. Fl. An.* 236. *With. Bot. Arr.* 566. *Relh. Cant.* 209. *Sibth. Ox.* 170. *Curt. Lond. fasc.* 2. *t.* 38.

A. nemorum alba. *Raii Syn.* 259.

GROVES and thickets throughout England are plentifully decorated with this elegant plant in the month of May, and it forms one of the most pleasing ornaments of that favourite season. The blossoms expand only in fine weather, drooping and folding up their petals against rain. Goats and sheep are the only domestic animals that will eat the wood anemone. To the former its acrimony is pleasant and wholesome, as they peculiarly delight in vegetables of this order; to the latter, when not accustomed to such food, it occasions a bloody flux, according to Dr. Withering.

The root is oblong, black externally, a little fleshy. Stem from a terminal bud, solitary, simple and single-flowered. Leaves ternate, slightly hairy, paler beneath, the leaflets variously lobed and cut: radical ones on long foot-stalks: those on the stem 3 together, not far from the flower, on shorter dilated stalks. Flower on a downy flower-stalk, solitary, without calyx or bracteæ, unless the stem-leaves should be deemed so. Petals about 6, elliptical, veiny, often purplish at the back. Stamina much shorter than the corolla; sometimes changed into narrow petals as in the double Hepatica. Germens downy.

The leaves, and even petals, are sometimes sprinkled with a minute fungus, taken by Mr. Curtis for the work of some insect, but described by late authors under the generic name of *Æcidium*. See Mr. Sowerby's English Fungi, *t.* 53.

Acorus
Calamus.

ACORUS Calamus.

Sweet Flag.

HEXANDRIA Monogynia.

GEN. CHAR. *Spadix* cylindrical, clothed with florets. *Cor.* of six petals, naked. *Style* none. *Caps.* of three cells.

SPEC. CHAR. Summit of the stalk above the flowers very long, and leaf-like.

SYN. Acorus Calamus. *Linn. Sp. Pl.* 462. *Huds. Fl. An.* 147. *With. Bot. Arr.* 357. *Relh. Cant.* 140. *Sibth. Ox.* 112. *Woodv. Med. Bot.* 472. *t.* 173. *Dryandr. in Ait. Hort. Kew. v.* 1. 474.

A. verus, sive Calamus Officinarum. *Raii Syn.* 437.

THIS is not a very common inhabitant of pools, ditches, and banks of rivers, and the flowers are extremely rare. We received this wild specimen from A. B. Lambert, Esq. gathered near Hampton Court. In the river Yare, both above and below Norwich, it is more plentiful than in most other places, insomuch that, at the Mayor's annual feast in June, the cathedral is entirely strewed with this plant, which, being trodden upon, perfumes the whole building; and bowers are constructed in the streets, of its leaves, neatly platted, and stuck with cyphers or other devices made of the garden ranunculus. The dried root powdered is successfully used by the country people in Norfolk as a cure for the ague.

The root is thick and spongy, with many long radicles, easily distinguished by its aromatic smell. Leaves upright, long, sword-shaped, bright-green, with a similar smell to that of the root, but fainter; not unlike the odour of myrtle leaves. Stem like the leaves, except in being thicker below the spike, which comes out laterally (in June or July), about mid-way from the root to the summit, and is cylindrical, tapering, naked, clothed with innumerable, thick-set, green flowers, each having six inflexed equal petals, six stamina rather shorter than the petals, and an elliptical germen with a sessile stigma.

Limosella aquatica.

Pub. 1798 by J. Sowerby London

LIMOSELLA aquatica.
Mudwort.

DIDYNAMIA Angiospermia.

GEN. CHAR. *Cal.* five-cleft. *Cor.* five-cleft, equal. *Stamina* approaching each other in pairs. *Caps.* with one cell, two valves, and many seeds.

SPEC. CHAR.

SYN. Limosella aquatica. *Linn. Sp. Pl.* 881. *Huds. Fl. An.* 276. *With. Bot. Arr.* 656. *Relh. Cant.* 245. *Sibth. Ox.* 197.
Plantaginella palustris. *Raii Syn.* 278.

FEW persons, except the scrutinizing botanist, observe this little plant, which occasionally occurs in muddy places where water has stagnated during the preceding winter. The Rev. Mr. Abbot sent it from Bedfordshire, flowering in the middle of July.

The root is annual, throwing out naked cylindrical prostrate runners, which take root at their extremities, and form new plants. Leaves radical, on long foot-stalks, spatulate, smooth, entire; we have not found them involute. Flowers small, radical, on simple flower-stalks, which become inflexed as the fruit ripens. Segments of the calyx sharp, the 2 uppermost least deeply divided. Corolla with a swelling tube; the limb in 5 equal segments, whitish without, red on the inside, the 2 uppermost of which are a little inflexed. Stamina ascending, divaricated in pairs towards each side of the flower. Style declining, with a blunt rough stigma. Capsule globular, with a groove along its upper side. Seeds very numerous.

Listera cordata.

OPHRYS cordata.

Heart-leaved Mountain Ophrys.

GYNANDRIA Diandria.

GEN. CHAR. *Nectary* consisting of a lip only, slightly carinated at the back.

SPEC. CHAR. Root of clustered fleshy fibres. A pair of heart-shaped leaves on the stem. Nectary with four lobes.

SYN. Ophrys cordata. *Linn. Sp. Pl.* 1340. *Huds. Fl. An.* 388. *With. Bot. Arr.* 988.

Bifolium minimum. *Raii Syn.* 385.

FOR this rare alpine plant we are obliged to Mr. Salt of Sheffield, a most assiduous investigator of the vegetable creation, who gathered it on the high turfy moors to the south-west of that town, as indicated by Dr. Smith in *Withering's Bot. Arr.* It grows in moist, shady spots, flowering in June or July.

The root is not much unlike those of *Ophioglossum vulgatum* and *Osmunda lunaria*; we suspect it to be, like those, truly perennial, and not forming a cluster of fibres one year which are totally obliterated (while a new cluster is forming) the next. Stem solitary, angular, 4 or 5 inches high, simple, erect, bearing about its middle a pair of opposite, heart-shaped, pointed, smooth, veiny leaves. Spike terminal, upright, composed of numerous green inconspicuous flowers, whose petals are spreading, equal in length, the 2 innermost only being narrower than the rest, and all often tinged with brown. Lip of the nectary long, dependent, yellowish, having 2 extended linear lobes at the base, and being cloven half way into two longer ones of the same figure. By these first-mentioned lobes this species is essentially distinguished from the common *Ophrys ovata* (not to mention size, or the form of the leaves), which has only very slight prominences in that part of its nectary. The capsule is globose, purplish, crowned with the permanent withering corolla, and bursting by lateral clefts.

Fontinalis antipyretica.

Nov. 1st 1796 Published by J. Thomas, London

FONTINALIS antipyretica.

Greater Water-moss.

CRYPTOGAMIA Musci.

GEN. CHAR. *Capsule* with a lid and veil, sessile, enclosed in an imbricated calyx.

SPEC. CHAR. Leaves pointed, folded so as to form a keel, disposed in three ranks. Fructification lateral.

SYN. Fontinalis antipyretica. *Linn. Sp. Pl.* 1571. *Huds. Fl. An.* 467. *With. Bot. Arr. v.* 3.75. *Relh. Cant.* 395. *Sibth. Ox.* 293.

F. major, foliis triangularibus complicatis, capitulis in foliorum alis sessilibus. *Raii Syn.* 79.

F. triangularis major complicata, e foliorum alis capsulifera. *Dill. Musc.* 254. *t.* 33. *f.* 1.

NOT uncommon in slow deep waters, growing upon rocks, posts, &c. floating with the stream considerably below the surface, and very rarely producing any fructification.

The root is small, but strong, and perennial. Stem slender, tough and wiry, much branched, from 3 or 4 inches to a foot long, clothed with numerous leaves, which are imbricated generally in three rows, of an ovate sharp-pointed form, but compressed so as to become acutely carinated, entire in the margin, their colour a deep transparent green. Capsules lateral, solitary, on very short scaly flower-stalks, elliptical, entirely invested with imbricated scales, and their orifice ciliated with about 16 red taper teeth. The lid is conical, and the veil of the same form, but rather longer.

Linnæus informs us, in his Flora Suecica, that the Swedes "stuff in this moss between their chimneys and wooden walls, to guard the latter from fire:" a passage which English writers have greatly misapprehended; for, without supposing any thing very incombustible in its nature, it may answer the purpose above described merely by preventing the passage of air.

Lond. 1798. Published by J. Sowerby, London.

BRYUM carneum.

Shining Bryum.

CRYPTOGAMIA Musci.

GEN. CHAR. *Caps.* with a lid. *Veil* smooth. *Flower-stalk* from a terminal tubercle.

SPEC. CHAR. Capsules pendulous, somewhat globular. Leaves alternate, acute, and entire.

SYN. Bryum carneum. *Linn. Sp. Pl.* 1587. *Huds. Fl. An.* 489. *With. Bot. Arr. v.* 3. 112.

B. nitidum, foliis Serpilli pellucidis angustioribus, reflexis capitulis subrotundis, carnei coloris, in pediculis brevioribus. *Raii Syn.* 102.

B. lanceolatum pellucidum, capsulis rotundis, pendulis, carneis. *Dill. Musc.* 400. *t.* 50. *f.* 69.

SENT from Cambridgeshire by the Rev. Mr. Hemsted. It is an uncommon, and not generally known species, growing in moist shady places, among grass, and by the margins of little rills, bearing its fruit in the spring.

Root perennial. Stems short, slender, simple at first, clothed with thick-set, alternate, lanceolate, pointed, entire leaves, of a bright pellucid green. Stalk terminal, a little longer than the stems, reddish, shining, pellucid and succulent. Capsule pendulous, when young green, pear-shaped and very obtuse, with a depressed lid; but as it ripens becoming of a flesh-coloured red, and when arrived at maturity the orifice is much dilated, so that in some specimens the capsule may by called almost campanulate. Our figure is not in that advanced state. The veil we have not seen. Dillenius represents it as awl-shaped and very tender, falling off the young capsules before they begin to nod. When the fruit is ripe, young shoots are protruded from the top of the stem, so that the fruit-stalks are no longer terminal.

We have compared ours with the specimens of Dillenius.

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Viburnum Lantana —	— 331
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